

# Index to Spring, Summer, Fall, Winter and Supplement Issues of Volume 55 (1991)

## INDEX TO AUTHORS

- Adams, J.D., Antiparkinsonian Drug Therapy, 173;  
 Altschuld, J.W., *see* Hale, K.M., 336;  
 \*\*\*
- Baldwin, J.N., Suggested Curricular Guidelines for Pharmacy Education: Substance Abuse and Addictive Disease, 311;  
 Batenhorst, R.L., *see* Calligaro, I.L.S., 40;  
 Beardsley, R.S., Chair Report for the Bylaws and Policy Development Committee, 16S;  
 Bell, A., It's Not *What* You Know, But *How* You Know, 383;  
 Biles, J.A.,  
   Beyond Our Walls: Part II. Culture - Science - Profession, 346;  
   The Role of the College/School of Pharmacy, 195;  
   Who Is Winning? Who Is Losing? 88;  
 Blackburn J.L., *see* Croteau, D.R., 113;  
 Boh, L.E.,  
   *See* Popovich, N.G., 181;  
   Survey of Experiential Programs: Course Competencies, Student Performance and Preceptor/Site Characteristics, 105;  
 Bolinger, A.M., HIV — Who Will Save the Children?, 143;  
 Bond, C.A., Effects of a Pharmacy Student Recruitment Program, 258;  
 Bourn, W.M., *see* Ferguson, P.W., 243;  
 Brown, T.R., *see* Monk, M.R., 120;  
 Buerki, R.A., The Changing Face of Pharmaceutical Education: Ethics and Professional Prerogatives, 71;  
 \*\*\*
- Calligaro, I.L.S., Pharmacy Research in Academic Institutions, 40;  
 Campbell, W.H., *see* Miller, W.A., 9S;  
 Carver, P.L., Use of Computer-Assisted Instruction to Review Microbiology and Antimicrobial Agents, 248;  
 Cassady, J.M., Chair Report for the Committee on Research and Graduate Affairs; 25S;  
 Charupatanapong N., Pharmacy Education in Thailand, 49;  
 Cochran, G.A.,  
   A Challenge for Pharmacy Educators, 91;  
   A Twenty Year Perspective, 198;  
   Chair Report for the Council of Faculties, 30S;  
 Cocolas, G.H.,  
   Corrigendum, 298;  
   Human Resources Policy and the Education of Future Health Professionals: Report of an AHC/FASHP Retreat, 398;  
   Meet the President: Nicholas G. Popovich, 209;  
   Report of the *Journal* Editor, 28S;  
 Cohen, J.L., Influence and Leverage, 404;  
 Cole, J.R., *see* Miller, W.A., 9S;  
 Collins, C.L., *see* Boh, L.E., 105;  
 Coons, S.J., Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, 126;  
 Cotter, P.M., A Computer Program for the Management of Prescription-Based Problems, 134;  
 Coughlan, J.W., Report of the Independent Auditor, 32S;  
 Crabtree, B.L., *see* Baldwin, J.N., 311;  
 Crismon, M.L., *see* Jermain, D.M. 45;  
 Croteau, D.R., Attitudes of Pharmacists Toward the Elderly, 113;  
 \*\*\*
- Day, R.L.,  
   A Cliffside View of Continuing Education, 196;  
   Chair Report of the Council of Deans, 30S;  
   The Drug Use Counseling Gap: Part II of What Could Become a Long Series, 90;  
   The Drug Use Counseling Gap: Part III of What Is Becoming a Long Series, 280;  
 De Muth, J.E.,  
   A National Pharmacy Survey of the Availability of Hardware Required for Continuing Education Delivery Systems, 36;  
   *See* Hanson, A.L., 20;  
 Desmarais, H.S., Human Resources for Health: Preparing for Tomorrow, 267;  
 Draugalis, J.R., *see* Coons, S.J., 126;  
 Dumbleton, S.M., Liberal Studies and the Pharmacy Curriculum: The Importance of Integration, 59;  
 \*\*\*
- Ebert, R.H., Health Professions Education for Year 2001, 356;  
 Einarson, T.R., *see* Pugsley, J.A. 332;  
 Engle, J.P., Chair Report for the Professional Affairs Committee, 20S;  
 \*\*\*
- Fassett, W.E., Affiliate Faculty and Student Evaluation, Discipline and Dismissals, 211;  
 Faust, R.E., Minutes of the Annual Meeting of the Directors of the American Foundation for Pharmaceutical Education, 191;  
 Ferguson, P.W., A Bachelor of Science Toxicology Program: Description, Resources, Student Profiles and Graduate Placement, 243;  
 Fife, K., Pharmacotherapeutics for the AIDS Patient, 394;  
 Fincham, J.E., *see* Smith, M.C., 30;  
 \*\*\*
- Gardner, V.R., *see* Lawson, K.A., 226;  
 Gerald, M.C.,  
   Chair Report for the Academic Affairs Committee, 12S  
   *See* Hale, K.M., 336;  
 Gibson, R.D., *see* Miller, W.A., 9S;  
 Godfrey, C.J., The Need for Change in Pharmaceutical Education: A Student's Perspective, 375;  
 Goldman, M., Molecular Strategies for the Inhibition of Human Immunodeficiency Virus Reverse Transcriptase, 387;  
 Goodrich, S.M., *see* Draugalis, J.R., 253;  
 Gumbhir, A.K., *see* Summers, K.H., 6;

Gumtow, R.H., *see* Cotter, P.M., 134;

\*\*\*

Haddad, A.M.,

Ethical Problems in Pharmacy Practice: A Survey of Difficulty and Incidence, 1;

*See* Roche, V.F., 211;

Hadzija, B.W., A Little Known Area of Pharmacists' Involvement: Analysis of Drugs, 177;

Hale, K.M., Pharmacy Practitioner Preferences for Certificate Program Structuring, 336;

Hanson, A.L., Facilitators and Barriers to Pharmacists' Participation in Lifelong Learning, 20;

Harris, E.M., *see* Carver, P.L., 248;

Hayton, W.L., STELLA: Simulation Software for the Pharmacokinetics Classroom, 131;

Hermann, D., *see* Calligaro, I.L.S., 40;

Hutchinson, R.A., *see* Calligaro, I.L.S., 40,

\*\*\*

Ives, T.J., *see* Baldwin, J.N., 311;

\*\*\*

Jermain, D.M., Students' Attitudes Toward the Mentally Ill Before and After Clinical Rotation, 45;

\*\*\*

Knowlton, C.H., Facts Transmission to Reflective Action: Pharmacy Education as an Experiential Dialectic, 365;

\*\*\*

Lawson, K.A., Using a Computer-Simulation Program and a Traditional Approach to Teach Pharmacy Financial Management, 226;

Lemke, T.L., Chair Report for the Academic Sections Coordinating Committee, 31S;

Levine, P.J., *see* Baldwin, J.N., 311;

Light, K.E., *see* Baldwin, J.N., 311;

Loacker, G., Transforming the Odyssey: Curriculum as an Outcome-Directed Pathway, 360;

Lowenthal, W., Teaching and Learning About Ethical Dilemmas in Pharmacy, 55;

\*\*\*

Manasse, H.R. Jr., *see* Miller, W.A., 9S;

Manning, M.C., Protein Chemistry: A Graduate Course in Pharmaceutical Biotechnology at the University of Kansas, 52;

Martin, B.C., *see* Ortmeier, B.G., 138;

Matuszak, A.J., *see* Roche, V.F., 55 211;

McCarthy, R.L., Ethics and the Computerization of Pharmacy, 218;

McGhan, W.F., *see* Draugalis, J.R., 253;

Mergener, M.A., A Preliminary Study to Determine the Amount of Continuing Education Credit to Award for Home Study Programs, 263;

Messer, S., *see* Smith, M.C., 30;

Meyer, S.M. The Pharmacy Student Population: Applications Received 1989-90, Degrees Conferred 1989-90, Fall 1990 Enrollments, 57S;

Miederhoff, P.A., *see* Baldwin, J.N., 311;

Miller, K.W., Treating Teaching as a Scholarly Activity, 373;

Miller, W.A., The Choice is Influence: The 1991 Argus Commission Report, 9S;

Monk, M.R., The Status of Home Intravenous Therapy Instruction Provided by Schools and Colleges of Pharmacy, 120;

Moore R.J., *see* Croteau, D.R., 113;

Mrtek, M.B., *see* Mrtek, R.G., 79;

Mrtek R.G., Parsing the Paradigms: The Case for Human Values in the Pharmacy Curriculum, 79;

\*\*\*

Nahata, M.C., Principles of Pediatric Pharmacotherapy, 155;

Nelson, A.A. Jr., *see* Roche, V.F., 322;

Newton, G.D.,

Development and Evaluation of Computer-Assisted Guided Design for Problem Solving in Self-Care Pharmacy Practice, 301;

Pharmaceutical Education and the Translation of Pharmaceutical Care into Practice, 340;

Nichol, M.B., A Multidisciplinary Approach to Teaching Pharmacy Students, 369;

Nona, D.A., Annual Report of the American Council on Pharmaceutical Education to the Profession and the Public, 187;

Novak, J.C., *see* Carver, P.L., 248;

\*\*\*

Olswang, S.G., *see* Fassett, W.E., 211;

Ortmeier, B.G., Career Commitment, Career Plans, and Perceived Stress: A Survey of Pharmacy Students, 138;

\*\*\*

Palmer, P.A., *see* Bond, C.A., 258;

Perrolle, J.A., *see* McCarthy, R.L., 218;

Peters, L.L., *see* Roche, V.F., 322;

Pitterle, M.E.,

*See* Boh, L.E., 105;

*See* Bond, C.A., 258;

Poirier, S., Teaching Human Values in Pharmacy Education: Case Studies from the Classroom and Hospital, 84;

Pope, C.N., *see* Ferguson, P.W., 243;

Popovich, N.G.

Chair Report for the Committee on Finance, 19S

Cultivating Intellectual Confidence in Our Students, 402;

Not All Over-The-Counter Drugs Are Safe, 166;

*See* Newton, G.D., 301;

The Educational Care of *Der Junge Nachwuchs*, 279;

The Educational Care of Pharmacy, 349;

Prongay, A., Towards the Determination of the Structure of HIV-1 p24: A Possible Target for Antiviral Therapy, 391;

Pugsley, J.A., Demand for a Canadian Doctor of Pharmacy, 332;

\*\*\*

Rascati, K.L., *see* Charupatanapong, N., 49;

Ray, M., *see* Miller, W.A., 9S;

Rennie, D., Ethos Habits and Prerogatives of Professionalism, 66;

Reuning, R.H., *see* Hale, K.M., 336; Riffie, W.H., Computer Technology Can Enhance Presentation of Pharmacological Principles, 148;

Roberts, B.L., *see* Ferguson, P.W., 243;

Roche, V.F.,

Assessing the Attributes which Influence Pharmacy School Selection to Promote Effective Recruiting Strategies, 322;

Current Approaches and Perceived Barriers to Scholarship in Women Pharmacy Faculty, 211;

Rubin, E., *see* Cocolas, G.H., 398;

Rucker, T.D., *see* Calligaro, I.L.S., 40;

Rupp M.T., Perceived Needs of Recent Graduates for Marketing-Related Knowledge and Skills: Implications for Pharmacy Education, 6;

\*\*\*

Sagraves, R., Prevention of Osteoporosis in Premenopausal and

- Postmenopausal Women, 158;  
 Schneider F., *see* Boh, L.E., 105;  
 Schnobrich, K., *see* Shannon, M.C., 317;  
 Sclar, D.A., Formulating Capital Investment Decisions with Monte Carlo Simulation, 152;  
 Shannon, M.C., A Descriptive Analysis of Pharmacy Continuing Education Programs Offered by ACPE-Approved Providers in 1989, 317;  
 Shepherd, M.D., *see* Lawson, K.A., 226;  
 Sherman, M.C. *see* Meyer, S.M. 57;  
 Smith, M.C.,  
   A Longitudinal Study of Attitude Change in Pharmacy Students During School and Post Graduation, 30;  
   *See* Monk, M.R., 120;  
 Ssoleau, J.K., *see* Dumbleton, S.M. 59;  
 Speedie, M.K., A Wonderful Profession for Women???, 405;  
 Steinwachs, D.M., Health Services Research: Its Scope and Significance, 274;  
 Stewart, R.B. Minutes of the Council of Faculties Business Meeting: July 8, 1991, Boston MA 53S;  
 Stock, C., *see* Baldwin, J.N., 311;  
 Summers, K.H., The Expected Impact of Managed Health Care Organizations on Pharmacy Education, 13;  
 Swandby, M., *see* Bond, C.A., 258;  
 Szkudlarek, B.A., *see* Rupp, M.T., 6;  
   \*\*\*  
 Tobias, S., What Makes Science Hard?, 378;  
 Tommasello, T., *see* Baldwin, J.N., 311;  
 Trinca, C.E.,  
   Introduction to AACP/ICI Pharmaceuticals Group Symposium, 65;  
   Minutes of the AACP Board of Directors Meeting: October 26-27, 1990, New Orleans LA 36S;  
   Minutes of the AACP Board of Directors Meeting: February 27-28, 1991, Washington DC, 40S;  
   Minutes of the AACP Board of Directors Meeting: July 4-5, 1991; Boston MA, 43S;  
   Minutes of the AACP Board of Directors Meeting: October 25-26, 1991, Baltimore MD 47S;  
   Minutes of the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, July 7-10, 1991, 51S;  
   Minutes of the House of Delegates Sessions and Awards Banquet, July 7-10, 1991, 52S;  
   Report of the Executive Director, 1S;  
   \*\*\*  
 Veatch, R.L., Professional Prerogatives: Perspectives of an Ethicist, 74;  
 Vottero, L.A., *see* Buerki, R.A., 71;  
   \*\*\*  
 Wolfgang, A.P., *see* Ortmeier, B.G., 138;

## INDEX TO SUBJECTS AND TITLES

- AACP-ICI Pharmaceuticals Groups Symposium  
 Changing (The) Face of Pharmaceutical Education: Ethics and Professional Prerogatives, R.A. Buerki and L.A. Vottero, 71;  
 Ethos Habits and Prerogatives of Professionalism, D. Rennie, 66;  
 Professional Prerogatives: Perspectives of an Ethicist, R.L. Veatch, 74;  
 AIDS  
 AIDS and the Pharmacy Student: A Need for Education, I. Kaplan, *et al.*, 115S.  
 AIDS Research and Pharmacy Practice Education, R.G. Deeter and J.A. Barone, 95S;  
 Infectious Diseases Clinic as a Teaching Site for Preparing Undergraduate PharmD Students to Face the Challenges of the AIDS Epidemic, A.K. Pau, 135S;  
 Interdisciplinary AIDS Education, C. Runyon and B. Ortmeier, 104S;  
 Meeting the Challenge of AIDS in Pharmacy Education, K. Plaisance, 119S;  
 Molecular Strategies for the Inhibition of Human Immunodeficiency Virus Reverse Transcriptase, M. Goldman, 387;  
 Pharmacotherapeutics for the AIDS Patient, K. Fife, 388;  
 Professional (The) Pharmacist as a Community Information Resource Person on AIDS, R.P. Maickel, *et al.*, 99S;  
 Survey of Pharmacists' Involvement in AIDS Education and an Inventory of Educational materials in Maryland Pharmacies, L. Burton, *et al.*, 105S;  
 Towards the Determination of the Structure of HIV-1 p 24: A Possible Target for Antiviral Therapy, A. Prongay, 391;  
 Abstracts of Podium and Poster Sessions at Annual Meetings, 68S;  
 Addiction  
 Addiction and Drug Abuse Prevention: An Interdisciplinary Elective for Health Professional Students, M.A. Koda-Kimble and A. Kopp, 147S;  
 Exploring and Expanding the Pharmacist's Role in Nicotine Addiction Treatment and Smoking Cessation, C. Stock, *et al.*, 150S;  
 Administrative Sciences  
 Student Research Career Development in the Behavioral and Administrative Sciences, C.E. Reeder and J.H. Phillips, 83S;  
 Admissions  
 Admission Criteria for the Continuing Education Curriculum Option (External PharmD) Program at the University of Illinois at Chicago, J.C. Russell, *et al.*, 79S;  
 Predicting Grade Point Average from Entrance Data, J.C. Russell, 81S;  
 Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School: A Comparison of Pharmacy School Students and High School Counselors, W.B. French, *et al.*, 81S;  
 Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School: Part Three: The Initiation of a Ten-Year Study, W.B. French and S.S. Thiessen, 104S;  
 Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School, Part V: A Five-Year Overview, W.B. French and S.S. Thiessen, 128S;  
 Relationship Between Pre- and Post-Admission Variables on Pharmacy Student Performance and on NABPLEX Scores: Demographic Variables, C.M. Monk, *et al.*, 115S;  
 Adult Medicine  
 Survey of Evaluative Methods Used in PharmD Adult Medicine Clerkships, G.D. Clifton, *et al.*, 96S;  
 Advertisements  
 Pharmacy Student Perception of the Efficacy and Accuracy of Pharmaceutical Drug Advertisements, K.J. Tietze and M.C. Smith, 133S;  
 Affiliate Faculty and Student Evaluation, Discipline and Dismissals, W.E. Fassett and S.G. Olswang, 211;  
 Aging  
 A Statewide Project to Include Aging Content in Colleges of Pharmacy, D. Helling, *et al.*, 136S;  
 Alcohol  
 Low Alcohol Sparkling Citrus Cooler (Sarasoda) in Healthy Children, M. Spino, *et al.*, 122S;  
 Algorithm for Deciphering Chemical Names into Structural Formulas, W.J. Murray, *et al.*, 68S;  
 Alienation: Its Meaning and Measurement in Pharmacy, L.M. Burton, A.B. McKay, 126S;  
 Alternative Medicine  
 A Survey of Pharmacy Students Knowledge

- of and Attitudes Toward Alternative Medicine, M.V. Nelson and C. Bugdalski, 84S;
- Alumni**  
Educational and Professional Self-Assessment: A Profile of Alumni and Student Responses, D.L. Howrie, *et al.*, 147S;
- Ambulatory Care**  
A Role Model Ambulatory Care Clinical Training Site in Community-Based Pharmacy, C.D. Peterson and E.O. Magarian, 154S;  
Evaluating Clinical Examination in Ambulatory Care Effectiveness of Oral Exams, J.I. Mackowiak, *et al.*, 76S;
- American Association of Colleges of Pharmacy**  
Report of the Executive Director, C.E. Trinca, 1S;  
Roster of the Voting Delegates in Attendance at the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, AACP Staff, 67S;  
The Choice is Influence: The 1991 Argus Commission Report, W.A. Miller, *et al.*, 8S;
- American Council on Pharmaceutical Education**  
Annual Report of the American Council on Pharmaceutical Education to the Profession and the Public, D.A. Nona, 187;
- American Foundation for Pharmaceutical Education**  
Minutes of the Annual Meeting of the Directors of the American Foundation for Pharmaceutical Education, R.E. Faust, 191;
- Analysis**  
Establishment and Analysis of the National Pharmacy Curriculum Data Base, J.R. Draugalis, S.M. Goodrich and W.F. McGhan, 253;  
Initial Experience with the Analysis of Student Activities in the Professional Experience Program, R.A. Hamilton and B.G. Bryant, 106S;  
Strategic (A) Analysis of the Pharmacy Technician Role in Tennessee, M.D. Smalley, *et al.*, 115S;
- Annual**  
Annual Report of the American Council on Pharmaceutical Education to the Profession and the Public, D.A. Nona, 187;  
Minutes of the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, July 7-10, 1991, C.E. Trinca, 51S;
- Apprehension**  
Meta-Analysis (A) of a Literature Review on Reducing Communication Apprehension, D.A. Riley, 142S;  
Personality, Communication Beliefs and Apprehension of Pharmacy Students, P.A. Miederhoff and E. Johns, 92S;
- Argus Commission**  
The Choice is Influence: The 1991 Argus Commission Report, W.A. Miller, *et al.*, 8S;
- Assessment**  
Assessing the Attributes which Influence Pharmacy School Selection to Promote Effective Recruiting Strategies, V.F. Roche, L.L. Peters and A.A. Nelson Jr., 322;  
Issues in Pharmacy Manpower Assessment: Results from a Statewide Survey, P.D. Hurd, *et al.*, 82S;  
Method (A) for Assessing Class Time Used for Teaching Various Practice Competencies, M.K. Slack, *et al.*, 91S;  
Practitioner's Assessment of the Externship Experience: A Retrospective Analysis, C. Aceves-Blumenthal and J.E. Stewart, 77S;
- Attitudes**  
Attitudes of Pharmacists Toward the Elderly, D.R. Croteau, R.J. Moore and Blackburn, 113, 129S;  
Attitudes of Idaho Pharmacists Toward Current Issues in Pharmacy: Prescribing, Impaired Pharmacists, PharmD Degree, Pharmacy Technician Training, B.A. Adamcik, 91S;  
Changing Attitudes of Pharmacy Graduates on Gender-Related Issues, L. Muzzin, *et al.*, 147S;  
Formulation and Modification of Senior Pharmacy Students' Attitudes Regarding Chemical Dependency Through Utilization of Elective Curriculum, G.J. Vogel, *et al.*, 148S;  
Longitudinal Study of Attitude Change in Pharmacy Students During School and Post Graduation, M. Smith, *et al.*, 30, 113S;  
Pharmacists' Attitudes Toward Continuing Education, G.R. Donehew and V.W. Bernardi, 138S;  
Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, S.J. Coons and J.R. Draugalis, 126;  
Practicing (The) PharmDs' Attitudes Towards their Education and Career: Six-Year Entry-Level vs. Two-Year Post-Baccalaureate Degree, A. Fazio, *et al.*, 133S;  
Professional Attitudes of Beginning PharmD Students, P.G. Grussing, *et al.*, 74S;  
Students' Attitudes Toward Clerkship Training and Pharmacy Practice, M.E. Dean, *et al.*, 120S;  
Students' Attitudes Toward and Knowledge of Aging and Geriatric Nursing Home Patients Before and After a Clinical Rotation, S.W. Miller, R.K. Miyahara, 147S;  
Students' Attitudes Toward the Mentally Ill Before and After Clinical Rotations D.M. Jermain and M. L. Crismon, 45;  
Teaching Practices and Attitudes of 500 Volunteer Preceptors: A Survey, Noguchi, *et al.*, 136S;
- Audio Cassette**  
Development of an Integrated Audio Cassette and Computer Based Patient Simulation, J.E. De Muth, *et al.*, 109S;  
Evaluation of an Integrated Audio Cassette and Computer Based Patient Simulation, L.E. Boh, *et al.*, 109S;  
Pharmacists' Satisfaction with Continuing Education and Audio Cassette Learning Packages, J.E. De Muth, 79S;
- Audioconferencing and Continuing Education: An Evaluative Study**, K. Liebowitz, *et al.*, 139S;
- Audio-Taping Program Support for the Pharmacy Curriculum - A Case Study**, E. Jackson and D. Johnson, 125S;
- Awards**  
Grants and Awards, 96, 201, 285, 408;
- \*\*\*
- Bachelor of Science**  
Bachelor (A) of Science Toxicology Program: Description, Resources, Student Profiles and Graduate Placement, P.W. Ferguson, W.M. Bourn, C.N. Pope and Roberts, 243;  
Entry-Level PharmD Program with a BS in Pharmacy Option, J.H. Fincher, 123S;  
Drake's Jointly Offered Pharmacy BS-JD, R. Morrow, *et al.*, 152S;
- Barriers**  
Clinical Pharmacy Activities: Pharmacists' Perceptions of Competence, Barriers, and Acceptance by Physicians and Nurses, B.A. Adamcik, 102S;  
Facilitators and Barriers to Pharmacists' Participation in Lifelong Learning, A.L. Hanson and J.E. De Muth, 20;  
Perceived Barriers to an Increased Clinical Role by Iowa Pharmacy Practitioners, G.J. Vogel and P.J. Levine, 149S;
- Behavior**  
Communication-Inhibiting Behaviors of Pharmacists as Perceived by Physicians and Nurses, E.M. DeSimone, 106S;  
Communication-Inhibiting Behaviors of Physicians, Nurses and Patients as Perceived by Pharmacists, E.M. DeSimone, II, 95S;  
Consumer Behavior Associated with Nonprescription Product Selection, J.G. Taylor and L.G. Suveges, 129S;  
Effects of a Group Research Project in Social and Behavioral Pharmacy, J.K. Mount, 82S;  
Instructional (The) Content of Behavioral Pharmacy, D. Dolinsky and D. Singh, 127S;  
Predicting Pharmacists' Behavior as Lifelong Learners, A.L. Hanson and De Muth, 139S;  
Predictive Validity of Health Belief and Locus of Control Concepts on Nonadherence Behavior, S.K. Elliott, 141S;  
Relationship of Behavioral Science to Pharmacy Practice, C.D. Hepler and P.A. Miederhoff, 74S;  
Student Research Career Development in the Behavioral and Administrative Sciences, C.E. Reeder and J.H. Phillips, 83S;  
Student Research in Behavioral Pharmacy Utilizing Computer Supports, D. Dolinsky and M. Pilkington, 81S;
- Beliefs**  
An Assessment of Pharmacy Students' Health-Related Attitudes and Beliefs, S.J. Coons and J. Draugalis, 111S;  
Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, S.J. Coons and J.R. Draugalis, 126;
- Beyond Our Walls: Part II. Culture - Science - Profession** J.A. Biles, 346;
- Biochemistry**  
Teaching of Biochemistry in Pharmacy, A. Marti, 86S;
- Biographical Sketch**  
Meet the President: Nicholas G. Popovich, G.H. Cocolas, 209;
- Biotechnology**  
Biotechnology and Microbiology for Pharmacy Majors at Ohio Northern University, M.L. Mallin, 99S;  
Biotechnology and Pharmacy Education: A Challenge and an Obligation, A.T. Awad, 78S;  
Biotechnology Development within the College of Pharmacy, M.E. Johnson, 56S;  
Biotechnology Products as Mediators in Immunopharmacological Research and Clinical Trials, A.T. Awad and M.M. Milks, 99S;  
Faculty Development in Biotechnology via Industry Visitation, G.S. Chappell and P.J. Cascella, 56S, 156;  
Implementing Biotechnology in Pharmacy Education, C.D. Black, *et al.*, 55S;  
Introducing Biotechnology, E.S. Becker, 108S;  
Peptides, Proteins, Biotechnology: Medicinal Chemistry Foundation and Applications in



- the UIC Pharmacy (PharmD) Curriculum, B.L. Currie and Woodbury, 124S;
- Programmed (A) Text in Pharmaceutical Biotechnology, S.W. Zito, *et al.*, 150S;
- Protein Chemistry: A Graduate Course in Pharmaceutical Biotechnology at the University of Kansas, M.C. Manning and J.W. Mitchell, 52;
- Teaching Biotechnology at the University of Illinois at Chicago, M.J. Groves, M.E. Klegerman, 99S;
- Using the Information in DNA to Improve Health Care, G.F. McGregor, 70S;
- Bloom's Taxonomy**
- Using Bloom's Taxonomy of the Cognitive Domain to Teach a Required Course in Pharmacology Laboratory Course: Teaching for Lifetime Learning, M.H. Malone, 108S;
- Book Reviews**
- Book reviews, 99, 204, 289, 411;
- Using Student-Written Book Reviews as a Teaching Tool, P.L. Ranelli, 115S;
- Books Reviewed**
- Biodegradable Polymers as Drug Delivery Systems*, 204;
- Biological Treatments in Psychiatry*, 413;
- Biopharmaceutics and Clinical Pharmacokinetics*, 100;
- Boyd's Textbook of Pathology, Volume 1 and 2*, 293;
- Chemical Kinetics—The Study of Reaction Rates in Solution*, 99;
- Cleanroom Design*, 412;
- Clinical Pharmacology—A Conceptual Approach*, 103;
- Concepts and Applications of Molecular Similarity*, 292;
- Cyclic Nucleotide Phosphodiesterases: Structure, Regulation and Drug Action*, 292;
- Cytochrome P-450 and Active Oxygen*, 291;
- Delerium: Acute Confusional States*, 295;
- Drug Bioscreening—Drug Evaluation Techniques in Pharmacology*, 102;
- Drug Discovery—A Casebook and Analysis*, 207;
- Formulation Factors in Adverse Reactions*, 290;
- Handbook of Nonprescription Drugs, 9th Edition*, 297;
- High Performance Liquid Chromatography in Biotechnology*, 293;
- Modern Pharmacology, 3rd Edition*, 294;
- Nicotine Psychopharmacology - Molecular, Cellular, and Behavioral Aspects*, 206;
- Crystalline and Amorphous Solids*, 100;
- Organic Synthesis - Reaction Guide*, 413;
- Pharmaceutical Dosage Forms: Tablets, Volume 3*, 204;
- Pharmaceutical Dosage Forms and Drug Delivery Systems*, 205;
- Pharmaceutical Calculations, 9th Edition*, 289;
- Pharmacology-Board Review Series*, 101;
- Physical Methods of Chemistry: Volume V. Determination of Structural Features of Crystalline and Amorphous Solids*, 100;
- Platelet-Activating Factor in Endotoxin and Immune Disease*, 414;
- Principles of Drug Action—The Basis of Pharmacology*, 101;
- Principles of Pharmacoeconomics*, 289;
- Protein Purification: Principles, High Resolution Methods and App*
- Rational Therapeutics. A Clinical Pharmacologic Guide for the Health Professional*, 205;
- Receptor Biochemistry - A Practical Approach*, 291;
- Remington's Pharmaceutical Sciences, 18th Edition*, 411;
- Serotonin Receptor: Subtypes - Basic and Clinical Aspects*, 290;
- Skin Penetration - Hazardous Chemicals at Work*, 295;
- Sociology for Pharmacists*, 414;
- Steroids and Neuronal Activity*, 413;
- Steroids in Diseases of the Central Nervous System*, 102;
- Sunscreens—Development, Evaluation, and Regulatory Aspects*, 206;
- The Biology of Nicotine Dependence*, 294;
- The Biology and Clinical Applications of Interleukin-2*, 296;
- The Nature of Drug Dependence*, 296;
- The Prevention of Sudden Cardiac Death*, 296;
- Wilson and Gisvold's Textbook of Organic and Pharmaceutical Chemistry*, 412;
- Bulletin Board**
- The National Pharmacy Bulletin Board Service: An On-Line Pharmacy Information System, W.W. Young and L.K. Benedict, 79S;
- Burnout**
- Analysis (An) of Burnout Among Faculty of Schools of Pharmacy, R.A. Jackson, *et al.*, 128S;
- Analysis (An) of Potential Causes of Burnout and Stress Among Pharmacy School Faculty, C.W. Barnett, *et al.*, 126S;
- Burnout Among Pharmacists, M.R. Lahoz and H.L. Mason, 72S;
- Matching the Theoretical Factor Structures of the Maslach Burnout Inventory (MBI) in Pharmacy, M.R. Lahoz, 114S;
- Student Burnout: A Study at Two Schools of Pharmacy, C.W. Barnett, *et al.*, 105S;
- Tedium in Pharmacy and Nonpharmacy Students, M.R. Lahoz and H.L. Mason, 74S;
- Bylaws**
- Chair Report for the Bylaws and Policy Development Committee, R.S. Beardsley, 16S;
- \*\*\*
- CD-ROM**
- Changes in an Elective Course in Pharmaceutical Literature Since the Introduction of CD-ROM Databases in a School of Pharmacy, E.C. Jackson, 125S;
- Calculations**
- PHCAL: Computer and Microcomputer Assisted Instruction in Pharmaceutical Calculations at the University of Toledo, K.S. Alexander and K. Halfaf, 80S;
- Pharmaceutical Calculations: A Study Guide Approach, R. Knoll and K. Nelson, 111S;
- Canada**
- Demand for a Canadian Doctor of Pharmacy Program, J. A. Pugsley, T. R. Einarson and M. Spino, 332, 122S;
- Survey (A) of Pharmacy Administration Courses in Colleges and Schools of Pharmacy in the United States and Canada, R. McCarthy, *et al.*, 142S;
- Survey of Saskatchewan Pharmacists' Opinions About Continuing Pharmacy Education, L. Suveges, *et al.*, 139S;
- Why Canadian Pharmacists Participate in Continuing Professional Education, M. Greer, 69S;
- Career**
- Career Benefits/Options for Women in the 21st Century, G. Smith, *et al.*, 146S;
- Career Choice, Plans and Commitment of Pharmacy Students, K.L. Rascati, 111S;
- Career Choice Satisfaction, and Post-BS Career Intentions of Pharmacy Students, K. Winans, and S. Madhavan, 130S;
- Career Commitment, Career Plans, and Perceived Stress: A Survey of Pharmacy Students, B.G. Ortmeier, A.P. Wolfgang and B.C. Martin, 138;
- Career Decision-Making Process: The Glaxo Pathway Evaluation Program-Pharmacy Professionals, E.M. Sogol, 111S;
- Career Pathways Following an Industrial Clinical Pharmacy Practice Post-Doctoral Fellowship, L. Scaros, *et al.*, 134S;
- Career Patterns of Male and Female Pharmacists: A 20 Year Cross-Sectional Study, P. Lurvey, 111S;
- Comparison of Career Choices of PharmD vs. BS Graduates of the University of Illinois at Chicago, N. Fjortoft, *et al.*, 131S;
- Classroom (A) Exercise in Pharmacy Career Planning, K.A. Speranza, 91S;
- Curriculum-Based (A) Approach to Recruiting Undergraduate Pharmacy Students for Graduate Research Careers, L.T. Welch, 107S;
- Development of an Industrial Pharmacy Career Curriculum Option, Z.T. Grapes and R.A. Jackson, 152S;
- Evaluation of Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students, C. Aceves-Blumenthal and E. Clouse, 118S;
- Factors Affecting Career Choice Decisions, J.L. Besier and R. Jang, 113S;
- Innovations in Pharmacy Education: Pharmacy Career Simulator, M. Perri and K. Duke, 88S;
- Pharmacy Career Choices - Shadow Programs, E.S. Becker, 127S;
- "Professional Fair" - A Forum for Career Options, R.M. Coley and R. Leutwiler, 119S;
- Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School: Part Three: The Initiation of a Ten-Year Study, W.B. French and S.S. Thiessen, 104S;
- Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School: Part IV, W.B. French and S.S. Thiessen, 115S;
- Relationships Between Student Personality, Intended Practice Area and Satisfaction with Pharmacy as a Choice of Career, M.S. Ortiz and A.P. Wolfgang, 92S;
- Relationship (The) of Personality and Value Factors to Career Choice in Pharmacy, P.A. Miederhoff, 80S;
- Shifts in Pharmacy Career Perceptions by Pharmacy Students, P.A. Ratto and D.A. Ralph, 102S;
- Stress Perception and Career Commitment: A Survey of Pharmacy Students, B.G. Ortmeier, *et al.*, 128S;
- Student Research Career Development in the Behavioral and Administrative Sciences, C.E. Reeder and J.H. Phillips, 83S;
- Students' Initial Career Intentions and Satisfaction with the Choice to Enroll in Pharmacy School, A.P. Wolfgang and M. Ortiz, 93S;
- Tracking into the Future, G.D. Lawrence, 94S;
- Zero-Credit Hour Course in Professionalism and Career Development, M.W.L. Lee and J.C. Russell, 101S;

## Case Study

Pharmacy Management by the Case Study Method, M. Perri III and J.A. McMillan, 92S;

## Certificate

Certificate (A) Program in Geriatric Pharmacy Education, J.B. Plein, *et al.*, 116S;  
Certificate Program in Geriatric Pharmacy for Pharmacists and Pharmacy Students, B. Adamcik, *et al.*, 123S;  
Certificate Program in Self-Care: Testing a Model, L.G. Suveges, *et al.*, 87S;  
Consultant Pharmacist Certificate Program, C.H. Brown, *et al.*, 109S, 139S;  
Development of a Certificate Program in Self Care for Pharmacy Practice, L.G. Suveges, *et al.*, 95S;  
Development of a Continuing Education Certificate Program in Intravenous Admixtures/Sterile Product Handling for Community Pharmacy Practitioners, Stiles, *et al.*, 154S;  
Evaluation of a Certificate Program in Self Care for Pharmacy Practice, L.G. Suveges, *et al.*, 101S;  
Evaluation of Case Study Interventions in a Drug Therapy Monitoring Certificate Program, D. Gal, *et al.*, 110S;  
Evolution of a Certificate Program in Geriatric Pharmacy Practice, T.E. Vorce-West and W. Simonson, 125S;  
Extended Offerings of Certificate Programs Through Training of Off-Campus Instructors, R.A. Carter, *et al.*, 138S;  
Pharmacy Practitioner Preferences for Certificate Program Structuring, K.M. Hale, J.W. Altschuld, M.C. Gerald and R.H. Reuning, 336;

## Chain Pharmacy

Assessment (An) of Chain Pharmacies' Costs of Dispensing a Third Party Prescription, K.W. Schafermeyer, *et al.*, 129S;  
Chain (The) Drug Industry's Views Regarding the Education and Training of Pharmacists, S.J. Coons, *et al.*, 102S;  
Impact of a Corporate Pharmacy Management Externship on Student Attitudes Toward Chain Pharmacy, E.H. Clouse, 82S;  
Work Stress in Chain Pharmacists, R. Jang, *et al.*, 94S;

## Chair Report (for the, of the)

Academic Affairs Committee, M.C. Gerald, 12S;  
Academic Sections Coordinating Committee, T.L. Lemke 31S;  
Bylaws and Policy Development Committee, R.S. Beardsley, 16S;  
Council of Deans, R.L. Day, 30S;  
Council of Faculties, G.A. Cochran, 30S;  
Finance Committee, N.G. Popovich, 19S;  
Professional Affairs Committee, J.E. Engle, 20S;  
Research and Graduate Affairs Committee, J.E. Cassady, 25S;

## Challenge (A) for Pharmacy Educators, G.A. Cochran, 91;

## Change

Change: Baccalaureate to PharmD at a Small, Private College of Pharmacy. A Plan for the Future, L.E. Foss and M. Grace, 137S;  
Proactive (The) Educational Resource: An Agenda for Change from Support Person to Change Agent, B.G. Felkey, 125S;

## Changing (The) Face of Pharmaceutical Education: Ethics and Professional Prerogatives, R.A. Buerki and L.A. Vottero, 71;

## Chemical Dependency

Education, Assistance and Prevention Program for Chemical Dependency Problems Among Pharmacy Students, V.J. Giannetti, *et al.*, 112S;

## Chemistry

Algorithm for Deciphering Chemical Names into Structural Formulas, W.J. Murray, *et al.*, 68S;  
Demonstration of a Computer-Assisted Acid-Base Tutorial for Medicinal Chemistry and Pharmaceutics, W.J. Murray, *et al.*, 108S;  
Environmental Issues in Chemistry: Bibliographic Instruction Through a Faculty-Librarian Partnership, M.S. Pearson, 139S;  
New Synthetic Routes Toward Beta-Bend Mimetics, M. del Rosario, *et al.*, 100S;  
Protein Chemistry: A Graduate Course in Pharmaceutical Biotechnology at the University of Kansas, M.C. Manning and J.W. Mitchell, 52;  
Teaching High School Chemistry Students about Pharmacy, J.I. Mackowiak, 93S;  
Use (The) of Microcomputer-Based Molecular Graphics in Teaching Medicinal Chemistry, J.G. Henkel, 68S;

## Clerkships

Activity Analysis of Clerkship Instruction, D.E. Beck and D. McMillan, 131S;  
Assessment (An) Tool in Evaluating the Impact of a Clinical Clerkship Program, S.A. Krikorian and F.R. Vogenberg, 145S;  
Clerkship Experiences in Indian Health Service Facilities in Oklahoma, N.R. Morris, *et al.*, 116S;  
Clerkship (A) in Pharmaceutical Advertising, A.L. Spunt and D. McCormick, 134S;  
Clinical (A) Clerkship's Emphasis on Pharmaceutical Care: Focus on Outcome, J.S. Rosenberg, *et al.*, 148S;  
Clinical Oncology/Investigational Drugs Clerkship, L. Hernandez and L.M. Gutierrez, 145S;  
Description of a Clerkship in Hospital Quality Assurance/Drug Usage Evaluation Activities, J.P. Thornton and A.L. Spunt, 106S;  
Description of a Clerkship in State Pharmaceutical Association Management, A.L. Spunt, 105S;  
Development (The) of a Home Health Care Clerkship, C.E. Rowe, 77S;  
Development of Community Health Services as Part of a Senior Clerkship Project: Implementation of a Community Pharmacy-Based Cholesterol Screening Service, F.M. Cox and C.L. Graham, 136S;  
Development of Standardized Evaluation Forms for Use at Decentralized Doctor of Pharmacy Clerkship Sites, S.A. Scott and C.D. Black, 117S;  
Evaluating Problem Solving in Postgraduate Clinical Pharmacy Clerkships, D.J. Belsheim, 94S;  
Evaluation of a Model for an Integrated Ambulatory Care Clerkship for Entry Level Doctor of Pharmacy Students, P.A. Simon, *et al.*, 117S;  
Objective-Based (An) Comparison of Student Performance in Clerkship Rotations Modeled by Full-Time Faculty and Volunteer Faculty, C.J. Nitchman and L.R. Marshall-Gunn, 147S;  
Organization and Elements of a Community Pharmacy Clerkship at the University of Southern California, School of Pharmacy, K.A. Johnson, and F.G. Weissman, 77S;  
Perspectives on the Clerkship Experience: A

Comparison of Students and Volunteer Preceptors, K.M. Hill-Besinque and J.K. Noguchi, 147S;

Protocol for the Validation of Life Experiences for Clinical Clerkships, C. Aceves-Blumenthal, *et al.*, 123S;

Student Satisfaction with Computerized Clerkship Placement, M.E. Dean, *et al.*, 120S;

Students' Attitudes Toward Clerkship Training and Pharmacy Practice, M.E. Dean, *et al.*, 120S;

Survey of Evaluative Methods Used in PharmD Adult Medicine Clerkships, G.D. Clifton, *et al.*, 96S;

Teaching Clerkships in a Multidisciplinary Epilepsy Ambulatory Care and Research Clinic, M.L. Wagner and R.C.S. Sachdeo, 146S;

Teaching Drug Utilization Evaluation in an Ambulatory Care Clerkship, J.P. Engle, 134S;

Training Program for Community Pharmacy Clerkship Instructors, M.P. Pevonka and M.A. Lemberger, 69S;

Use of Computer Case Presentations to Review Clinical Kinetics During Clinical Clerkships, L. Bauer, *et al.*, 78S;

Use of Pharmacy Profile Reviews with Physician Consults as a Teaching Tool in an Ambulatory Care Clerkship, J.P. Engle, *et al.*, 120S;

Written and Verbal Literature-Related Skills Required in Senior Clinical Clerkships at the University of Iowa, B.H. Rowland, 70S;

## Clinical

Administration of an Objective Structured Clinical Examination (OSCE) to a Stratified Sample of Doctor of Pharmacy Students, K. Hill-Besinque and Noguchi, 134S;  
Advantages and Disadvantages of Clinical Service Contracts in a PharmD Entry-Level program, R.J. Anderson, 144S;  
Career Pathways Following an Industrial Clinical Pharmacy Practice Postdoctoral Fellowship, L. Scaros, *et al.*, 134S;  
Courseware Development for Clinical Education: Use of the Macintosh, J.F. Dasta and S. Abate, 131S;  
Development and Implementation of an Introductory Clinical Program Designed for a Non-Medical Center Locale, E. French, *et al.*, 84S;  
Development and Motivation of a Volunteer Clinical Faculty, B.L. Sauer, 117S;  
Drug Use Evaluation as a Mechanism to Increase Student Involvement in Clinical Research and Publication, M. Rodriguez de Bittner and A. McKay, 135S;  
Experimental Design in Clinical Research: A Graduate Course Using a Student Centered-Problem Based Approach, R.M. Lush, *et al.*, 132S;  
Multidisciplinary (A) Clinical Experience in a Memory and Alzheimers Clinic, Finley, 119S;  
Parenteral Therapy Services - Gateway to Clinical Pharmacy Practice, R.A. Giudici, *et al.*, 133S;  
Perceived Barriers to an Increased Clinical Role by Iowa Pharmacy Practitioners, G.J. Vogel and P.J. Levine, 149S;

## Clinical Clerkship

Clinical Clerkship in Community Practice: Former Students' Evaluation, C. Mailhot and D. Lamarre, 122S;

Competency (A) Based Clinical Clerkship: Program Design, Content, and Evaluation Procedures, T.R. Covington, *et al.*, 94S

- Computerized (A) Patient Encounter Tracking System for BS/PharmD Students on Clinical Clerkships, L.L. Peters, *et al.*, 83S;
- Medication Group as a Teaching Module in Psychiatric Clinical Clerkship, A.A. Cardoni, 119S;
- Use of Clinical Clerkships for Teaching How to Apply Ethics to Pharmacy Practice, J.A. Barone, *et al.*, 120S;
- Use of Computer Case Presentations to Review Clinical Kinetics During Clinical Clerkships, L. Bauer, *et al.*, 78S;
- Clinical Examination**
- An Objective Structured Clinical Examination (OSCE) in a Doctor of Pharmacy Program, K.M. Hill-Besinque and J.K. Noguchi, 119S;
- Clinical Laboratory Medicine: An Experimental Learning Approach for PharmD Students**, L.N. Swanson, *et al.*, 76S;
- Clinical Pharmacy**
- Chronic Hemodialysis Unit as a Clinical Pharmacy Teaching Site, A. Lau and I. Tang, 116S;
- Clinical (The) Pharmacist as a Home Care Provider, D.M. Stewart and R.L. Ferrando, 77S;
- Clinical Pharmacist (The) in Oncologic Drug Development and Cancer Research, B.L. Lum, 85S;
- Clinical Pharmacy Activities: Pharmacists' Perceptions of Competence, Barriers, and Acceptance by Physicians and Nurses, B.A. Adamcik, 102S;
- Clinical Pharmacy Research in the Emergency Department, J. Barone and W. Byerly, 95S
- Clinical Pharmacy Services in the Community: A Required Course, A.C. D'Angelo, 75S;
- Comparison (A) of the Personality and Work Value Characteristics of Clinical and Industrial Pharmacists, P.A. Miederhoff, 85S;
- Economic Cost Impact Research — Clinical Pharmacists' Role, Z.T. Grapes, 83S;
- Evaluation (An) of Clinical Pharmacy Services in 5 Miami Area Hospitals, Aceves-Blumenthal and C. Celestin, 106S;
- Integration of Problem-Solving Into a Clinical Pharmacy and Therapeutics Course Through the Pharmacists' Work-up of Drug-Related Problems, R.A. Hamilton, *et al.*, 153S;
- Multidimensional Working Sampling of Clinical Pharmacists' Work Activities, L.D. Ried and T.E. Vorce-West, 127S;
- Support of Clinical Pharmacy Activities by Pharmacists, Nurses and Physicians, B.A. Adamcik, *et al.*, 81S;
- Student Perceptions of Clinical Pharmacy Services Provided by Community Pharmacy Preceptors, D.K. Fowlkes and J.R. McCormack, 83S;
- Clinical Research**
- Clinical Pharmacy Research in Immunology and Rheumatology, R.E. Small and S.M. Johnson, 83S;
- Clinical Research Education in Entry-Level Doctor of Pharmacy Program, A. Lau, *et al.*, 131S;
- Clinical (A) Research/Drug Development Fellowship as a Faculty Sabbatical Experience, S.R. Batey, *et al.*, 85S;
- Development of a Clinical Research Unit Using an On-Campus Student Health Center, J.A. Barone, *et al.*, 84S;
- Direction (A) for Enriching Undergraduate Education through Participation in Clinical Pharmacy Research, M.C. Nahata, 117S;
- Masters in Clinical Research and Drug Development — a Pilot Program, F.M. Eckel, *et al.*, 85S;
- Strategic Planning Factors in Clinical Pharmacy Research Program Development, R.H. Reuning, 119S;
- Clinical Scientists**
- Educating Clinical Scientists: Experience with a PhD Program, P.D. Kroboth, *et al.*, 137S;
- Clinical Services in a Community Pharmacy, C.S. Campbell, *et al.*, 81S;
- Clinical Trials**
- Biotechnology Products as Mediators in Immunopharmacological Research and Clinical Trials, A.T. Awad and M.M. Milks, 99S;
- Code Response**
- Improved Pharmacist Code Response by a Computer-Assisted Teaching Program, D. Fye, *et al.*, 88S;
- Colleges of Pharmacy**
- Curricular Change at the College of Pharmacy at the University of New Mexico, R.V. Saenz and D.W. Raisch, 153S;
- Importance of Collaborative Efforts Between Pharmacy Practice Sites and Colleges to Develop Postgraduate Residency Program, D.E. Letendre, 138S;
- Role (The) of the College/School of Pharmacy, J.A. Biles, 19S;
- Status (The) of Home Intravenous Therapy Instruction Provided by U.S. Schools and Colleges of Pharmacy, M.R. Monk, T.R. Brown, D.D. Garner and M.C. Smith, 120;
- Communi-Pharm**
- Conversion of the Communi-Pharm Computer Simulation Program to an Apple II Format, D.A. Ralph, *et al.*, 72S;
- Post Hoc Validation of Teaching Simulations: An Illustration Using Communi-Pharm, D.B. Christensen, *et al.*, 130S;
- Communication**
- Cognitive Changes in Adults: Effects on Communicating Health Information, J. Novak, 105S;
- Communication-Inhibiting Behaviors of Pharmacists as Perceived by Physicians and Nurses, E.M. DeSimone II, 106S;
- Communication-Inhibiting Behaviors of Physicians, Nurses and Patients as Perceived by Pharmacists, E.M. DeSimone, II, 95S
- Computer Conferencing for Pharmacy Education and Communication, A. McKay and W. Seeley, 125S;
- Empathy Training and Pharmacy Student Response Styles, V.J. Giannetti, 72S;
- Evaluation (An) of the Curricular Placement of a Core Communications Course, W.A. Hopkins and C.W. Barnett, 103S;
- Implementation of a Self-Evaluated Experiential Component in a Pharmacy Communications Course, L. Lotz, *et al.*, 113S;
- Incorporating Written and Verbal Communication Exercises Into a Self-Care Pharmacy Practice Course, S.M. Pawlak, 106S;
- Improving Communication Between a College of Pharmacy's Professional Experience Program and the Pharmacy Preceptor, D.M. Marchand, 83S;
- Interactive Video: Enhancement of Communication Skills for Pharmacy Students, M.W. McKenzie and C.L. Kimberlin, 83S;
- Meta-Analysis (A) of a Literature Review on Reducing Communication Apprehension, D.A. Riley, 142S;
- Personality, Communication Beliefs and Apprehension of Pharmacy Students, P.A. Miederhoff and E. Johns, 92S;
- Pharmacist Self-Concept, Predisposition to Communicate, and Desire to Counsel, B.A. Berger, *et al.*, 141S;
- Pharmacy Communication Courses: State of the Art, B.A. Berger and R. Noel, 127S;
- Preceptor Perceptions of the Communication Skills of Non-Native First-Year Pharmacy Students, K.A. Johnson and B.D. Seal, 77S;
- Special (A) Communication Course for Non-Native English-Speaking Students, R.S. Beardsley, 71S;
- Student Research Projects in a History of Pharmacy Course: A Means of Teaching Communication Skills, A.J. Matuszak, 93S;
- Teaching Communication Skills, L.J. Morin, *et al.*, 153S;
- Teaching Performance Based Communication Skills, B. Berger and B.C. Felkey, 93S;
- Teaching Professional Communications as a Comprehensive Required Course, E.M. DeSimone II, 123S;
- Community Clerkship**
- Analysis of Pharmacy Students' Community Practice Clinical Decision-Making Skills, M. Greer and K. Kirk, 90S;
- Clinical Clerkship in Community Practice: Former Students' Evaluation, Mailhot and D. Lamarre, 122S;
- Clinical Clerkship Training for BS Pharmacy Students in a Community Pharmacy Environment, C.H. Brown, 83S;
- Clinical Pharmacy Services in the Community: A Required Course, A.C. D'Angelo, 75S;
- Clinical Services in a Community Pharmacy, C.S. Campbell, *et al.*, 81S;
- Development of Community Health Services as Part of a Senior Clerkship Project: Implementation of a Community Pharmacy-Based Cholesterol Screening Service, F.M. Cox and C.L. Graham, 136S;
- Development of a Community Pharmacy Practice Patient Simulation Program on a Microcomputer, M. Pitterle, L. Boh, 76S;
- Development of a Comprehensive Community Pharmacy Computer Teaching Laboratory, L.V. Allen Jr. and M.L. Stiles, 69S;
- Initiating a Residency in Community Pharmacy, G.E. Downs, *et al.*, 76S;
- Organization and Elements of a Community Pharmacy Clerkship at the University of Southern California, School of Pharmacy, K.A. Johnson, and F.G. Weissman, 77S;
- Planning and Implementation Prescription Evaluation Program for Home-Bound Patients, A.H. Taubman, *et al.*, 77S;
- Training Program for Community Pharmacy Clerkship Instructors, Pevonka and M.A. Lemberger, 69S;
- Community Pharmacy**
- Business (A) Law Course in the Community Pharmacy Track Sequence at the University of Southern California School of Pharmacy, F.G. Weissman, *et al.*, 151S;
- Community Pharmacists' Recommendations for Cold Symptoms, M.A. Langman, *et al.*, 116S;
- Effect of Attitudes Toward Rx-to-OTC Switches on Pharmacists' Evaluation of Rx-to-OTC Switch Candidates, S. Madhavan, 103S;
- Evaluating Cholesterol Screening in a Community Pharmacy, O. Ibrahim, *et al.*, 106S;
- Inflation: Sales, Profits, and Investment in Community Pharmacy, G.D. Lawrence, 80S;



- Professional (The) Pharmacist as a Community Information Resource Person on AIDS, R.P. Maickel, *et al.*, 99S;
- Researcher Characteristics Affecting Site Cooperation by Community Practitioners, B.A. Bleit and E.H. Clouse, 92S;
- Resource Material for a Community Pharmacy Ownership Course, W.L. Fitzgerald, Jr., *et al.*, 141S;
- Services Offered by Arkansas Community Pharmacies and Actions Likely to be Taken if the Estimated Acquisition Cost (EAC) Proposed by the Health Care Financing Administration (HCFA) is Implemented, J.R. McCormack, 128S;
- Stress Factors in the Retail Pharmacy Setting, D.A. Ralph and W.B. French, 104S;
- Competence**
- Clinical Pharmacy Activities: Pharmacists' Perceptions of Competence, Barriers, and Acceptance by Physicians and Nurses, B.A. Adamcik, 102S;
- Competency (A) Based Clinical Clerkship: Program Design, Content, and Evaluation Procedures, T.R. Covington, *et al.*, 94S
- Competency Assessment: Identification and Validation of Competence Statements, D.W. Fielding, *et al.*, 122S;
- Method (A) for Assessing Class Time Used for Teaching Various Practice Competencies, M.K. Slack, *et al.*, 91S;
- Compliance**
- Impact (The) of Value Added Services on Patient Drug Compliance, W. Siganga, *et al.*, 127S;
- Meta-Analysis (A) of Medication Compliance Studies, R.S. Pippalla and D.A. Riley, 143S;
- Computer**
- Assessment (An) of Need for Video- and Computer-Mediated Continuing Education, M.L. Greer, 78S;
- Comparison and Evaluation of Three Microcomputer Drug Interaction Programs, T.I. Poirier and R.A. Giudici, 116S;
- Comparison (A) of Computer-Simulation and Traditional Methods for Teaching Financial Management to Pharmacists, K.A. Lawson, *et al.*, 109S;
- Computer Conferencing for Pharmacy Education and Communication, A. McKay and Seeley, 125S;
- Computer Literacy Training for Colleges of Pharmacy, J.L. Bootman, *et al.*, 72S;
- Computer Literature Searching in an Acute Medicine Clerkship, J.K. Noguchi, *et al.*, 88S;
- Computer (A) Program for the Management of Prescription-Based Problems, P.M. Cotter and R.H. Guntow, 134;
- Computer Skills Development Project for Faculty and Academic Support Staff, P.A. Hovis and H.F. Cole, 70S;
- Computer Technology Can Enhance Presentation of Pharmacological Principles, W.H. Riffe, 148;
- Computer-Aided In Vitro Pharmacokinetic System as a Teaching Model for Undergraduate Pharmaceutics Laboratory Use, H.A. Yun, *et al.*, 110S;
- Computer-Assisted Scheduling of Externships and Clerkships, W.E. Fassett, *et al.*, 76S;
- Computer-Delivered Patient Case Simulations in Clinical Pharmacy Education, L.E. Davis and E.F. Safir, 146S;
- Computer-Evaluated (A) Exercise in Writing for General Audiences Designed for Second Year Pharmacy Students, M.J. Jinks, 116S;
- Computer-Simulated Pharmacology Experiment: Use of Probits in Biological Assay, W. Caciini and S. Roberts, 88S;
- Computerized (A) Patient Encounter Tracking System for BS/PharmD Students on Clinical Clerkships, L.L. Peters, *et al.*, 83S;
- Computerized (A) Experiential Site Selection Program: Administrative Uses, M.D. Thorn, *et al.*, 94S
- Computerized (A) Scenario-Question (S-Q) Database and Test Assembly Software in a Pharmacy Curriculum, W.R. Kirchain, *et al.*, 116S;
- Conversion of the Communi-Pharm Computer Simulation Program to an Apple II Format, D.A. Ralph, *et al.*, 72S;
- Demonstration of a Computer-Assisted Acid-Base Tutorial for Medicinal Chemistry and Pharmaceutics, W.J. Murray, *et al.*, 108S;
- Descriptive (A) Evaluation of Medication Problem Solving Skills of Institutional Pharmacists via Microcomputer Patient Simulations, G.E. MacKinnon, *et al.*, 56S;
- Development (The), Application and Testing of Microcomputers to Delivery Continuing Education, L.A. Pagliaro, 109S;
- Development of a Community Pharmacy Practice Patient Simulation Program on a Microcomputer, M. Pitterle, L. Boh, 76S;
- Development of a Comprehensive Community Pharmacy Computer Teaching Laboratory, L.V. Allen Jr. and M.L. Stiles, 69S;
- Development of an Integrated Audio Cassette and Computer Based Patient Simulation, J.E. De Muth, *et al.*, 109S;
- Development of Microcomputer Modules for a Nonprescription Drug Course and Statistical Evaluation of Computer-Assisted Instruction vs. Traditional Lecture Presentation, H.M. Anderson-Harper, *et al.*, 82S;
- Discharge Medication Counseling for Pharmacy Clerkship Students Using Computer-Generated Information Materials, D.L. Brown, *et al.*, 76S;
- Ethics and the Computerization of Pharmacy, R.L. McCarthy and J.A. Perrolle, 218;
- Evaluation of End-User Computer Searches, M. Abate, *et al.*, 110S;
- Fostering Computer Literacy Through the Use of Innovation Opinion Leaders, A. McKay, *et al.*, 70S;
- Implementation of Microcomputers in Pharmacy Laboratories for Computer-Based Training, L.J. Shapiro, 73S;
- Interactive Pharmacokinetic Instruction Using Personal Computers, E.G. Boyce and L.A. Lawson, 95S;
- Microcomputer Applications Course in Pharmacy Practice for Doctor of Pharmacy Students, R.A. Giudici and B.H. Livengood, 119S;
- Microcomputer-Based Preparation of Lecture Aids, J.G. Henkel, 78S;
- Microcomputers Retail Pharmacy Management Support: An Integrated Heuristic Model, G.E. Bass, 74S;
- Premarketing (A) Survey of Interest in CE Credit Programs for Computers, D.A. Riley, 125S, 138S;
- So What Else Can You Do with an M300?, H. Silverman, 70S;
- STELLA: Simulation Software for the Pharmacokinetics Classroom, W.L. Hayton, 131;
- Strategy (A) for Introducing Computers into Schools of Pharmacy, A. McKay, *et al.*, 71S;
- Student Attitudes About Computers in Pharmacy, H.M. Anderson-Harper, *et al.*, 93S;
- Student Research in Behavioral Pharmacy Utilizing Computer Supports, D. Dolinsky and M. Pilkington, 81S;
- Student Satisfaction with Computerized Clerkship Placement, M.E. Dean, *et al.*, 120S;
- Student Use of a Computerized, Experiential Site Selection Program, M.D. Thorn, *et al.*, 96S;
- Teaching PharmD Students to Use an Online Information System: Experiences with COLLEAGUE, C.H. Fenichel, 70S;
- Two Programs to Convert MEDLINE Off-print Files for Storage in Microcomputer Database Management Systems, W.E. Fassett, 89S;
- Use of Computer Case Presentations to Review Clinical Kinetics During Clinical Clerkships, L. Bauer, *et al.*, 78S;
- Using a Computer-Simulation Program and a Traditional Approach to Teach Pharmacy Financial Management, K.A. Lawson, M.D. Shepherd and V.R. Gardner, 226;
- Using a Microcomputer-Based System to Teach the Principles of Online Computerized Information Retrieval, C.M. Rienke, 89S;
- Computer Assisted Instruction**
- CAI Models for Teaching and Assessing Performance in Professional Experience Programs, R. Jang and W. Fant, 150S;
- CAI in Medicinal Chemistry: How Far Can We Go?, W. Fant, *et al.*, 87S;
- Computer Aided Instruction of How to Calculate a Cost-of-Dispensing, K.A. Proctor, *et al.*, 80S;
- Computer-Assisted Instruction: A Review of Microbiology and Antimicrobial Agents, P.L. Carver, *et al.*, 110S;
- Computer-Assisted Instruction (CAI) for Medicinal Chemistry. Acid-Base Properties and Solubility of Drugs, R.L. Jacoby, 138S;
- Computer-Assisted Instruction in Pharmacokinetics: The SIMU Series, T.J. Sullivan, 79S;
- Design (The), Fabrication and Incorporation of CAI Modules into the Professional Curriculum, W.H. Shelver and W.M. Henderson, 90S;
- Development and Evaluation of Computer-Assisted Guided Design for Problem Solving in Self-Care Pharmacy Practice, G.D. Newton, N.G. Popovich and J.D. Lehman, 301;
- Evaluation of CAI Versus TLP, H.M. Anderson-Harper and H.L. Mason, 72S;
- Evaluation of an Undergraduate Computer-Assisted Instruction Program on Congestive Heart Failure, S.A. Myre and W.K. Fant, 88S;
- Improved Pharmacist Code Response by a Computer-Assisted Teaching Program, D. Fye, *et al.*, 88S;
- PHCAL: Computer and Microcomputer Assisted Instruction in Pharmaceutical Calculations at the University of Toledo, K.S. Alexander and K. Halfaf, 80S;
- Staff Development Program in Drug Information Involving Computer-Assisted Instruction (CAI), J.S. Rosenberg, *et al.*, 140S;
- Teaching Use of *Current Contents* by Computer-Assisted Instruction, R.J. Cluxton, *et al.*, 89S;
- Use (The) of Computer-Assisted Case Presentations in a Clinical Therapeutics Course, A.K. Hurst, *et al.*, 89S;
- Use of Computer-Assisted Instruction to Review Microbiology and Antimicrobial



- Agents, P.L. Carver, J.C. Novak and E.M. Harris, 248;
- Conjoint Analysis of Antihistamine Products: A Comparison of Contingent Valuation and Desirability Scales, G. Reardon and D.S. Pathak, 112S;
- Consulting
- Consultant Pharmacist Certificate Program, C.H. Brown, *et al.*, 109S;
  - Consulting Opportunities for Pharmacists, L.L. Naeger, 116S;
  - Consultant Pharmacist Certificate Program, C.H. Brown, *et al.*, 139S;
  - Development (The) and Implementation of Consultative Services to a State Hospital for the Mentally Retarded or Developmentally Disabled, C.D. Ponte, *et al.*, 96S;
  - Development of Instruments to Evaluate the Florida Self-Care Consultant Law, B.A. Bulfer, 103S;
  - Teaching and Consulting in a Home Health Care Agency, S. Lorentz and D.S. Adler, 77S;
  - Use of Pharmacy Profile Reviews with Physician Consults as a Teaching Tool in an Ambulatory Care Clerkship, J.P. Engle, *et al.*, 120S;
- Consumer
- Consumer Behavior Associated with Nonprescription Product Selection, J.G. Taylor and L.G. Suveges, 129S;
  - Consumer Satisfaction with Source of Prescription Medications: A Telephone Survey, H.A. Smith and S.J. Coons, 126S;
- Continuing Education
- A Cliffside View of Continuing Education, R.L. Day, 196;
  - Analysis of Financial Support Provided for Continuing Education in the Institutional Practice of Pharmacy, R.R. Couris and V.W. Bernardi, 87S;
  - Assessment (An) of Need for Video- and Computer-Mediated Continuing Education, M.L. Greer, 78S;
  - CE Factors Relating to Pharmacists' Morale, D.A. Riley, 87S;
  - Comparison (A) of the Learning Styles of Students, Faculty and Practitioners: Implications for Continuing Education, D.A. Riley, 69S;
  - Continuing Education Market Segments for Pharmacists, G.R. Donehew, *et al.*, 124S;
  - Continuing Education Preferences of Pharmacists: Comparisons Among the Clients of Five Schools of Pharmacy, D.S. Newton and R.B. Reed, 69S;
  - Continuing Education Preferences of Tennessee Pharmacists, K.B. Roberts, *et al.*, 69S;
  - Continuing (A) Education Program in Chemical Dependence Intervention, T. Tommasello, 69S;
  - Continuing (A) Education Program Designed to Make a Difference, C.E. Cox, and A.I. Ponting, 100S;
  - Descriptive (A) Analysis Between a Nonmandatory and a Mandatory Licensing Period for Pharmacy Continuing Education Offering in Nebraska, M.F. Sylvestri and J.E. Van Arsdsall, *et al.*, 100S;
  - Descriptive (A) Analysis of Pharmacy Continuing Education Programs Offered by ACPE-Approved Providers in 1989, M.C. Shannon and Schnobrich, 317;
  - Descriptive (A) Analysis of Program Selection by Pharmacists to Meet Mandatory Continuing Education Requirements in Michigan, W.D. Hardigan, 109S;
  - Development (The), Application and Testing of Microcomputers to Deliver Continuing Education, L.A. Pagliaro, 109S;
  - Development of a Continuing Education Certificate Program in Intravenous Admixtures/Sterile Product Handling for Community Pharmacy Practitioners, Stiles, *et al.*, 154S;
  - Doctor of Pharmacy Rotation in Continuing Education, J.A. Gaska, *et al.*, 124S;
  - Effect of a Unit of Continuing Education on Perceived Knowledge and Reported Practice, J.E. Fincham and M. Smith, 113S;
  - Evaluating Effects on Performance, J. Novak, 100S;
  - Evaluation of a Geriatrics Continuing Education Program, L.D. Ried and Vorce-West, 87S;
  - Evaluation (An) of an In-Depth Single-Theme Continuing Education Correspondence Series, R.B. Supernaw, *et al.*, 79S;
  - Evaluation (An) of Continuing Education Directors, Their Environments and Productivity, R.L. Watkins, 109S;
  - Evaluation of Teleconferencing for Continuing Pharmaceutical Education, R.H. Brushkiewitz, *et al.*, 87S;
  - Home Video: Design for Future Continuing Education, R.W. Bennett and J.W. Blank, 79S;
  - Impact of Relicensure Prerequisites on Pharmacist Preferences and Utilization of Continuing Education, B.L. Jones, *et al.*, 87S;
  - Implementation of a Continuing Education Series to Enhance the Presentation Skills of Pharmacists, J.P. Engle and S.C. Firman, 139S;
  - Implementation (The) of Student-Directed Continuing Pharmaceutical Education, P.J. Levine, 100S;
  - Live Lecture versus Home Study: Evaluation of the Educational Effect of an Identical CE Program Delivered by Two Formats, E.M. Sogol, *et al.*, 87S;
  - National (A) Pharmacy Survey of the Availability of Hardware Required for Continuing Education Delivery Systems J.E. De Muth, 36;
  - Pharmacists' Attitudes Toward Continuing Education, G.R. Donehew and V.W. Bernardi, 138S;
  - Pharmacists' Satisfaction with Continuing Education and Audio Cassette Learning Packages, J.E. De Muth, 79S;
  - Predicting Pharmacists' Behavior as Lifelong Learners, A.L. Hanson and J.E. De Muth, 139S;
  - Preliminary (A) Study to Determine the Amount of Continuing Education Credit to Award for Home Study Programs, M.A. Mergener, 263;
  - Premarketing (A) Survey of Interest in CE Credit Program for Computers, D.A. Riley, 125S, 138S;
  - Survey of Saskatchewan Pharmacists' Opinions About Continuing Pharmacy Education, L. Suveges, *et al.*, 139S;
  - Therapeutics on Videotape for the Continuing Education of Community and Hospital Pharmacists, R.W. Bennett and J.W. Blank, 69S;
  - Why Canadian Pharmacists Participate in Continuing Professional Education, M. Greer, 69S;
- Contract
- Advantages and Disadvantages of Clinical Service Contracts in a PharmD Entry-Level program, R.J. Anderson, 144S;
- Contract Grading
- The Use of Contract Grading in a Pharmacy Communication Course, B.G. Felkey and B.A. Berger, 80S;
- Correspondence Course
- Effect (The) of Multiple Mailings on Correspondence Course Enrollments, M.A. Mergener and R.B. Supernaw, 86S;
  - Evaluation (An) of an In-Depth Single-Theme Continuing Education Correspondence Series, R.B. Supernaw, *et al.*, 79S;
- Corrigendum, G.H. Cocolas, 298;
- Cost
- Computer Aided Instruction of How to Calculate a Cost-of-Dispensing, K.A. Proctor, *et al.*, 80S;
  - Cost Analysis of an Entry-Level Doctor of Pharmacy Degree Program, E.H. Taylor, *et al.*, 123S;
  - Cost (The) Effectiveness of Combining Computer-Library-Media Services in a School of Pharmacy, E.C. Jackson, *et al.*, 123S;
  - Economic Cost Impact Research — Clinical Pharmacists' Role, Z.T. Grapes, 83S;
- Council of Deans
- A Cliffside View of Continuing Education, R.L. Day, 196;
  - Chair Report of the Council of Deans, R.L. Day, 30S;
  - Drug (The) Use Counseling Gap: Part II of What Could Become a Long Series, Day, 90;
  - Drug (The) Use Counseling Gap: Part III of What Is Becoming A Long Series, Day, 280;
  - Influence and Leverage, J.L. Cohen, 404;
- Council of Faculties
- Challenge (A) for Pharmacy Educators, G.A. Cochran, 91;
  - Chair Report for the Council of Faculties, G.A. Cochran, 30S;
  - Minutes of the Council of Facilities Business Meeting: July 8, 1990, Boston, MA, R.B. Stewart, 53S;
  - Twenty (A) Year Perspective, G.A. Cochran, 198;
- Counseling
- Community Pharmacists' Recommendations for Cold Symptoms, M.A. Langman, *et al.*, 116S;
  - Degree (The) of Comfort Experienced by Pharmacy Students in Patient Counseling, S.B. Beck, *et al.*, 141S;
  - Discharge Medication Counseling for Pharmacy Clerkship Students Using Computer-Generated Information Materials, D.L. Brown, *et al.*, 76S;
  - Drug (The) Use Counseling Gap: Part II of What Could Become a Long Series, Day, 90;
  - Drug (The) Use Counseling Gap: Part III of What Is Becoming A Long Series, Day, 280;
  - Gender Differences in Pharmacy Students' Attitudes Toward Patient Counseling, B.L. Svarstad and P. Ranelli, 73S;
  - Home Diagnostic Products: Teaching the Student to Educate the Public, M.R. Morton and W.W. Waite, 118S;
  - Patient Counseling: A Unique Externship Experience at a VA Medical Center, Basso and B. Lieberman, 136S;
  - Patient Counseling: The Pharmacist's Advice as Perceived by Consumers, B.T. Lively and M.G. Holiday, 127S;
  - Pharmacists' OTC Consultations: An Evaluation of Message Content and Context, C.W. Barnett, *et al.*, 127S;
  - Pharmacist Self-Concept, Predisposition to

- Communicate, and Desire to Counsel, B.A. Berger, *et al.*, 141S;
- Reasons and Resources which were Influential in the Decision to Attend Pharmacy School: A Comparison of Pharmacy School Students and High School Counselors, W.B. French, *et al.*, 81S;
- Relationship (The) of Gender to Ease of Patient Counseling, S.B. Beck, *et al.*, 125S;
- Strategic Selection of Elective Coursework Aided by Intensive Advisor Counseling and Guidance Manual, M.W. Lee and J.C. Russell, 88S;
- Course**
- Changes in an Elective Course in Pharmaceutical Literature Since the Introduction of CD-ROM Databases in a School of Pharmacy, E.C. Jackson, 125S;
- Design (The) and Evaluation of a Graduate Course in Physical Pharmacy, M.S. Kislalioglu, *et al.*, 125S;
- Development and Evaluation of a Pharmacology Course for a Nontraditional PharmD Curriculum, A. Flynn and N. Katz, 139S;
- Development (The) and Evaluation of a Pharmacy and Health Care Course, D.M. Scott and D.L. Arneson, 103S;
- Development and Evaluation of a New Course in Principles of Pharmaceutical Business, A. Gumbhir and K. Farmer, 112S;
- Development of a Course on the Philosophy of the Science of Pharmacy Administration, R.M. Schulz, *et al.*, 112S;
- Development of a Rational Drug Therapy Course for Physicians, D.P. Elliott, *et al.*, 100S;
- Development (The) of a Self-Paced Modular Course in Drug Information, D.J. Michael, 89S;
- Effectiveness of a Pharmacy Ethics Course, J.D. Richardson, 129S, 144S;
- Evaluation of Student Knowledge Base and Improvement for a Pharmacy Practice Dispensing Laboratory Course, L.L. Marshall and T. Miller, 135S;
- Experimental Design in Clinical Research: A Graduate Course Using a Student Centered-Problem Based Approach, R.M. Lush, *et al.*, 132S;
- Experiential Learning and Professional Socialization Through Large Group Interaction in Two Self Medication Courses, H. Radchuk, *et al.*, 135S;
- Five-Year (A) Study of Geriatric Pharmacy Practice Courses Offered and Utilization of the Pharmacy Practice for the Geriatric Patient Textbook by Canadian and American Schools of Pharmacy, C.H. Brown, 149S;
- Graduate (A) Seminar Course Focused on Presentation Skills, T.A. Shepard, 110S;
- Implementation of a Self-Evaluated Experiential Component in a Pharmacy Communications Course, L. Lotz, *et al.*, 113S;
- Incorporating Written and Verbal Communication Exercises Into a Self-Care Pharmacy Practice Course, S.M. Pawlak, 106S;
- New (A) Approach to the Pharmacology Laboratory Course: Teaching for Lifetime Learning, D.M. Sylvester and T.P. LaHann, 107S;
- New (A) Learning/Teaching Model- Partnership Between Students, TAs and Coordinator in a Compounding and Dispensing Course, H. Radchuk, *et al.*, 135S;
- Pharmacy Communication Courses: State of the Art, B.A. Berger and R. Noel, 127S;
- Protein Chemistry: A Graduate Course in Pharmaceutical Biotechnology at the University of Kansas, M.C. Manning and J.W. Mitchell, 52;
- Required (A) Basic Management Course Developed and Implemented by Pharmacy Practitioners, R.E. Smith and R.J. Hospodka, 80S;
- Special (A) Communication Course for Non-Native English-Speaking Students, R.S. Beardsley, 71S;
- Sterile (A) Product Technology Course for Hospital and Home Health Care Practitioners, K.S. Alexander, 102S;
- Survival (A) Course for New Teachers of Pharmacy Students, K.W. Lem and S.K. Shimomura, 137S;
- Teaching Professional Communications as a Comprehensive Required Course, E.M. DeSimone II, 123S;
- Zero-Credit Hour Course in Professionalism and Career Development, M.W.L. Lee and J.C. Russell, 101S;
- Courseware Development for Clinical Education: Use of the Macintosh**, J.F. Dasta and S. Abate, 132S;
- Critical Thinking**
- Integrating Critical Thinking into a Social Science Course Through Library Resources and Non-Directive Research, K.J. Blume, 140S;
- Promoting the Development of Critical Thinking Skills in the Pharmaceutical Sciences, F. Garafalo and V. LoPresti, 138S;
- Cultivating Intellectual Confidence in Our Students**, N.G. Popovich, 402;
- Current Approaches and Perceived Barriers to Scholarship in Women Pharmacy Faculty**, V.F. Roche, A.M. Haddad and A.J. Matuszak, 236;
- Curriculum**
- Assessment of Student Interest in a Tracking Approach to Curricular Differentiation, J.R. Draugalis and J.L. Bootman, 72S;
- Comprehensive (A) Integrated Geriatrics Curriculum for Pharmacy Students and Practicing Pharmacists, B.M. Schechter, *et al.*, 131S;
- Computerized (A) Scenario-Question (S-Q) Database and Test Assembly Software in a Pharmacy Curriculum, W.R. Kirchain, *et al.*, 116S;
- Curricular Change at the College of Pharmacy at the University of New Mexico, R.V. Saenz and D.W. Raich, 153S;
- Design (The), Fabrication and Incorporation of CAI Modules into the Professional Curriculum, W.H. Shelver and W.M. Henderson, 90S;
- Development of a Comprehensive Geriatrics Curriculum for Student Pharmacists, B.R. Williams, *et al.*, 132S;
- Development of an Elective Differentiated Curriculum, Z.T. Grapes, *et al.*, 72S;
- Development of a New Pharmacy Curriculum at the University of Saskatchewan, S.M. Wallace, *et al.*, 124S;
- Development (The) of a Program to Increase Cross-Cultural Awareness within the Pharmacy Curriculum, D.R. Rickert, *et al.*, 123S;
- Development of an Industrial Pharmacy Career Curriculum Option, Z.T. Grapes and R.A. Jackson, 152S;
- Drake's Jointly Offered Pharmacy BS-JD, R. Morrow, *et al.*, 152S;
- Entry-Level PharmD Program with a BS in Pharmacy Option, J.H. Fincher, 123S;
- Establishment and Analysis of the National Pharmacy Curriculum Data Base, J.R. Draugalis, S.M. Goodrich and W.F. McGhan, 253;
- Ethical Behavior and Misconduct in Scientific Research: A Topic Needing Attention in Graduate Curricula, W.M. Davis, 108S;
- Evaluation of a Curriculum Development Project in Geriatric Pharmacy at the University of Arkansas for Medical Sciences College of Pharmacy: Problems and Possible Solutions, J. Garrett, 76S;
- Integrated Biology-Chemistry Curriculum for Enhancing Professional Course Preparation, V.C. LoPresti, *et al.*, 86S;
- Integrating Basic Management and Marketing into a College of Pharmacy Curriculum, E.H. Clouse, *et al.*, 92S;
- Integration of Ethics in Course Content Across the Curriculum, V. Giannetti, *et al.*, 154S;
- Integration of Library Resources into the Pharmaceutics Curriculum, B.S. Reiss, 140S;
- Integration of Library Resources throughout a Five-Year Pharmacy Curriculum, I.P. Kaplan, *et al.*, 140S;
- Integration of Library Skills Throughout the Curriculum at the St. Louis College of Pharmacy, J.A. Longstreth, 139S;
- Liberal Studies and the Pharmacy Curriculum: The Importance of Integration, S.M. Dumbleton and J.K. Soleau, 59;
- Parsing the Paradigms: The Case for Human Values in the Pharmacy Curriculum, R.G. Mrtek and M.B. Mrtek, 79;
- Pediatric Pharmacy Curriculum Survey, R.A. Mangione, *et al.*, 107S;
- Pharmacy Education in Thailand N. Charupatanapong and K.L. Rascati, 49;
- Questions That Patients Ask Pharmacy Students and Implications for the Curriculum, T. Reutzel and Furmaga, 143S;
- Suggested Curricular Guidelines for Pharmacy Education Concerning Alcohol and Other Drug Abuse and Addictive Disease, J.N. Baldwin, *et al.*, 311;
- Teaching Pharmacy Ethics in an Integrated Undergraduate Curriculum, J.D. Richardson, 90S;
- Transforming the Odyssey: Curriculum as in Outcome-Directed Pathway, G. Loacker, 361;
- \*\*\*
- DPC-PTR Act**
- Using an Event Study Methodology to Study the Expected Effects of the DPC-PTR Act of 1984 on Stock Returns of Pharmaceutical Manufacturers, K.A. Proctor, *et al.*, 115S;
- Database**
- An Interactive Relational Database (Infosite) to Facilitate Baccalaureate Pharmacy Students in Selection of Experiential Training Sites, T.A. Sajbel and K.E. Johnson, 148S;
- Deans Chairman's Section**
- A Cliffside View of Continuing Education, R.L. Day, 196;
- Drug (The) Use Counseling Gap: Part II of What Could Become a Long Series, Day, 90;
- Drug (The) Use Counseling Gap: Part III of What Is Becoming A Long Series, Day, 280;
- Influence and Leverage, J.L. Cohen, 404;
- Decision**
- Analysis of Pharmacy Students' Community Practice Clinical Decision-Making Skills, M. Greer and K. Kirk, 90S;
- Appropriateness of RX-to-OTC Switches: Long-Linear Analysis of Pharmacists Decision-Making, S. Madhavan, 111S;
- Decision Analysis Model for Hospital Phar-

- macy Purchasing Group Participation, G.E. Bass, *et al.*, 103S;
- Determinant Attributes in Pharmacists' Drug Product Choice Decisions, E.F. Igboke and J. Thomas III, 112S;
- Modelling Drug Formulary Decisions, M.L. Greer, 104S;
- Degree**
- Chain (The) Drug Industry's Views Regarding the Education and Training of Pharmacists, S.J. Coons, *et al.*, 102S;
- Characteristics of Pharmacists Choosing a Nontraditional Graduate Degree in Pharmacy Administration, P.D. Hurd and D.R. Rickert, 90S;
- Comparison (A) of Student Attitudes Toward Pharmacy Practice in BS and PharmD (Entry-Level) Programs, C.W. Barnett, *et al.*, 102S;
- Comparison (A) of Three Degree Options in Influence Upon Pharmacists' Job Satisfaction and Work Activities, C.W. Barnett and H.W. Matthews, 143S;
- Drake's Jointly Offered Pharmacy BS-JD, R. Morrow, *et al.*, 152S;
- Evaluation of Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students, C. Aceves-Blumenthal and E. Clouse, 118S;
- Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students: A Two-Year Analysis, C. Aceves-Blumenthal, 135S;
- The Pharmacy Student Population: Applications Received 1989-90, Degrees Conferred 1989-90, Fall 1990 Enrollments, S.P. Meyer and M.S. Sherman, 57S;
- The Practicing PharmDs' Attitudes Towards their Education and Career: Six-Year Entry-Level Vs. Two-Year Post-Baccalaureate Degree, A. Fazio, *et al.*, 133S;
- Delphi**
- Developing Content for a Strategic Marketing Module Using a Delphi Technique, J.H. Phillips and F. Trainor, 112S;
- Demand**
- Demand for a Canadian Doctor of Pharmacy Program, J.A. Pugsley, T.R. Einarson and M. Spino, 332, 122S;
- Demand for Pharmacists in North Carolina, W.P. Johnston, *et al.*, 112S;
- Predicting Demand for an External Degree Program Using the C-O-R Model of Adult Participation in Education, P. Lurvey and K. Kirk, 79S;
- Dependency**
- Comparison (A) of Pharmacy Students' Attitudes Following Participation in a Chemical Dependency Seminar, K. Rascati and J. Richards, 143S;
- Continuing (A) Education Program in Chemical Dependence Intervention, T. Tommasello, 69S;
- Coordinating the Care of Chemically Dependent Pharmacy Students Through a Statewide Recovery Network, D.W. Teat and T.J. Ives, 142S;
- Development of a Specialty Residency Program in Chemical Dependency, T.J. Ives, *et al.*, 149S;
- Education, Assistance and Prevention Program for Chemical Dependency Problems Among Pharmacy Students, V.J. Giannetti, *et al.*, 112S;
- Formulation and Modification of Senior Pharmacy Students' Attitudes Regarding Chemical Dependency Through Utilization of Elective Curriculum, G.J. Vogel, *et al.*, 148S;
- Reaching Urban Youth in Middle Schools with a Substance Abuse Educational Program: Undergraduate Pharmacy Students at Texas Southern University as Teachers and Role Models, C.S. Mehta and N. Charupatanapong, 155S;
- Designer Drugs: New Substances of Abuse, B.C. Leimbeck, *et al.*, 78S;
- Development and Evaluation of Computer-Assisted Guided Design for Problem Solving in Self-Care Pharmacy Practice, G.D. Newton, N.G. Popovich and J.D. Lehman, 301;
- Devices**
- Specialized Research Pharmacy Coordinating Center for Clinical Trials Involving Drugs and Devices, M.R. Sather, *et al.*, 96S;
- Diagnostics**
- Home Diagnostic Products: Teaching the Student to Educate the Public, M.R. Morton and W.W. Waite, 118S;
- Director**
- Evaluation (An) of Continuing Education Directors, Their Environments and Productivity, R.L. Watkins, 109S;
- Leadership (The) Orientations of Hospital Pharmacy Directors: Implications of an Empirical Study for Graduate Course Content, T. Reutzel, *et al.*, 142S;
- Problems (The) of Hospital Pharmacy Directors, S. Seoka, 131S;
- Report of the Executive Director, C.E. Trinca, 1S;
- Dispensing Laboratory**
- Competing for Prescription Dollars: The Public's Views of Physician Dispensing, L.A. Pink and T.L. Hageboeck, 126S;
- Development (The) and Implementation of an Integrated Pharmacy Practice Dispensing Laboratory, G.D. Newton, *et al.*, 117S;
- Evaluation of Student Knowledge Base and Improvement for a Pharmacy Practice Dispensing Laboratory Course, L.L. Marshall and T. Miller, 135S;
- New (A) Learning/Teaching Model - Partnership Between Students, TAs and Coordinator in a Compounding and Dispensing Course, H. Radchuk, *et al.*, 135S;
- Dissertation Titles**
- A Study of Dissertation Titles Related to Pharmacy Administration: Trends and an Exploratory Content Analysis, G. Reardon and S.W. Birdwell, 128S;
- Drug**
- Drug Design in AIDS Research, M. Goldman, 388;
- Drug (The) Use Counseling Gap: Part III of What Is Becoming A Long Series, R.L. Day, 280;
- Drug Use Evaluation as a Mechanism to Increase Student Involvement in Clinical Research and Publication, M. Rodriguez de Bittner and A. McKay, 135S;
- Educational (An) Program to Improve Adverse Drug Reaction Reporting, Awareness and Compliance, M.F. Sylvestri, *et al.*, 117S;
- Specialized Research Pharmacy Coordinating Center for Clinical Trials Involving Drugs and Devices, M.R. Sather, *et al.*, 96S;
- Drug Abuse**
- Addiction and Drug Abuse Prevention: An Interdisciplinary Elective for Health Professional Students, M.A. Koda-Kimble and A. Kopp, 147S;
- Designer Drugs: New Substances of Abuse, B.C. Leimbeck, *et al.*, 78S;
- National (A) Pharmacy Program of Community Substance Abuse Education, A.C. Tommasello, 152S;
- Suggested Curricular Guidelines for Pharmacy Education Concerning Alcohol and Other Drug Abuse and Addictive Disease, J.N. Baldwin, *et al.*, 311;
- Teaching an Interdisciplinary Pharmacy Course in Drug Abuse and Social Policy, D.E. Joranson and P.L. Ranelli, 74S;
- Drug Development**
- Clinical (The) Pharmacist in Oncologic Drug Development and Cancer Research, B.L. Lum, 85S;
- Clinical Research/Drug Development Fellowship as a Faculty Sabbatical Experience, S.R. Batey, *et al.*, 85S;
- Drug Lab Revisited: A Survival Analysis Approach, W.K. Wu, 112S;
- Pooled Time Series and Cross-Sectional Analysis Evaluation of New Drug Development, W.K. Wu and A.I. Wertheimer, 142S;
- Teaching the Importance of Pharmacokinetics in Drug Development, T. Shephard, *et al.*, 102S;
- Drug Information**
- Development (The) of a Self-Paced Modular Course in Drug Information, D.J. Michael, 89S;
- Increased Emphasis on Online Searching in a Didactic PharmD Drug Information Course, D.J. Michael and S.H. Gable, 88S;
- Introducing Preprofessional Students to Drug Literature, J.M. Anderson, 140S;
- Pilot Study to Determine Sources and Satisfaction of Drug Information for the Elderly, H.M. Anderson-Harper, *et al.*, 114S;
- Readability Evaluation of 9 Patient Drug Information Sources, L. Mallett and W.J. Spruill, 96S;
- Staff Development Program in Drug Information Involving Computer-Assisted Instruction (CAI), J.S. Rosenberg, *et al.*, 140S;
- Student-Centered (A) Approach for Teaching Drug Information and Literature Evaluation, G.J. Vanscoy, *et al.*, 140S;
- Utilization (The) of Interactive Video and Instructional Design Systems in the Delivery of Visualized Patient Drug Information, B.G. Felkey, *et al.*, 105S;
- \*\*\*
- EOQ in the Primary Wholesaler Environment, G.E. Bass, *et al.*, 90S;
- Education**
- Determining Managerial Education and Training Needs of Pharmacy Owners and Managers, M.D. Smalley, *et al.*, 109S;
- Educational (The) Care of *Der Junge Nachwuchs*, N.G. Popovich, 279;
- Educational (The) Care of Pharmacy, N.G. Popovich, 350;
- Expected (The) Impact of Managed Health Care Organizations on Pharmacy Education, K.H. Summers and A.K. Gumbhir, 13;
- Facts Transmission to Reflective Action: Pharmacy Education as an Experiential Dialectic, C.H. Knowlton, 365;
- Health Professions Education for Year 2001, R.H. Ebert, 357;
- Interdisciplinary AIDS Education, C. Runyon and B. Ortmeier, 104S;
- Meeting the Challenge of AIDS in Pharmacy Education, K. Plaisance, 119S;



- Need (The) for Change in Pharmaceutical Education: A Student's Perspective, C.J. Godfrey, 376;
- Pharmaceutical Education and the Translation of Pharmaceutical Care Into Practice, G.D. Newton, 340;
- Pharmacy Education in Thailand N. Charupatanapong and K.L. Rascati, 49;
- Pharmacists' Views on Congruence Between Practice and Education, H.A. Smith, *et al.*, 114S;
- Educational**
- Innovative Educational Activities for Pharmacy Schools, M. Montagne, *et al.*, 153S;
- Proactive (The) Educational Resource: An Agenda for Change from Support Person to Change Agent, B.G. Felkey, 125S;
- Effects of a Pharmacy Student Recruitment Program, C.A. Bond, M.E. Swandby, P.A. Palmer and M.E. Pitterle, 258;
- Emergency Department**
- Clinical Pharmacy Research in the Emergency Department, J. Barone and W. Byerly, 95S
- Elderly Patients Admitted Through Emergency Departments - General Medicine or Geriatric Medicine?, M.R. Yakabowich, 95S
- Opportunities Presented by a Clinical Rotation in the Emergency Department, S. Lavin, *et al.*, 133S;
- Empathy Training and Pharmacy Student Response Styles, V.J. Giannetti, 72S;
- Enrollments**
- The Pharmacy Student Population: Applications Received 1989-90, Degrees Conferred 1989-90, Fall 1990 Enrollments, S.P. Meyer and M.S. Sherman, 57S;
- Entry-Level Degree**
- Comparison (A) of Student Attitudes Toward Pharmacy Practice in BS and PharmD (Entry-Level) Programs, C.W. Barnett, *et al.*, 102S;
- How Do Pharmacy Faculty, PharmD and Undergraduate Fifth-Year Pharmacy Students View the "All PharmD" Degree?, N. Charupatanapong, 154S;
- Job Activities and Practice Patterns of Entry Level PharmD and BS Graduates, F.M. Cox and N.V. Carroll, 91S;
- Teaching Institutional Review Boards (IRB) Participation by Pharmacists in an Entry-Level Doctor of Pharmacy Program, A. Lau and T. Hoon, 145S;
- Establishment and Analysis of the National Pharmacy Curriculum Data Base, J.R. Draugalis, S.M. Goodrich and W.F. McGhan, 253;
- Ethics**
- Effectiveness of a Pharmacy Ethics Course, J.D. Richardson, 129S, 144S;
- Ethical Behavior and Misconduct in Scientific Research: A Topic Needing Attention in Graduate Curricula, W.M. Davis, 108S;
- Ethical Positions Taken by Second Year Pharmacy Students, L.J. Muzzin, *et al.*, 135S;
- Ethical Problems in Pharmacy Practice: A Survey of Difficulty and Incidence, A.M. Haddad, 1;
- Ethics and the Computerization of Pharmacy, R.L. McCarthy and J.A. Perrolle, 218;
- Ethics (An) Laboratory as an Educational Tool in a Pharmacy Law and Ethics Course, M.A. Pirl, 113S;
- Ethos Habits and Prerogatives of Professionalism, D. Rennie, 66;
- Evaluation of the Introduction of Ethics into Clinical Clerkships, D. Guetz, *et al.*, 135S;
- Incorporating Biomedical Ethics into an Introductory Biology Course, E.S. Becker, 68S;
- Integration of Ethics in Course Content Across the Curriculum, V. Giannetti, *et al.*, 154S;
- Intensive Ethics Seminar for Pharmacy Faculty, A.M. Haddad, 132S;
- Medical (A) Ethics Survey of Hospital Pharmacists in Tennessee, P.S. Cady, *et al.*, 114S;
- Professional Prerogatives: Perspectives of an Ethicist, R.L. Veatch, 74;
- Resolution (The) of Conflict Through Deception: Implications for the Teaching of Ethics in Pharmacy, R.A. Jackson and M.A. Pirl, 130S;
- Studying the Ethics and Values of Pharmacy Students and Pharmacists, M. Montagne, *et al.*, 93S;
- Teaching and Learning About Ethical Dilemmas in Pharmacy, W. Lowenthal, 55;
- Teaching Pharmacy Ethics in an Integrated Undergraduate Curriculum, J.D. Richardson, 90S;
- Use of Clinical Clerkships for Teaching How to Apply Ethics to Pharmacy Practice, J.A. Barone, *et al.*, 120S;
- Evaluation**
- Comparative Evaluations by Graduate Students and Faculty, H.L. Smith, *et al.*, 101S;
- Development and Validation of a Program Evaluation for External PharmD Degree Students, P.G. Grussing, *et al.*, 103S;
- Development of Standardized Evaluation Forms for Use at Decentralized Doctor of Pharmacy Clerkship Sites, S.A. Scott and C.D. Black, 117S;
- Evaluating Cholesterol Screening in a Community Pharmacy, O. Ibrahim, *et al.*, 106S;
- Evaluating Effects on Performance, J. Novak, 100S;
- Evaluating Self-Efficacy Judgments of Pharmacy Students for Different Practice Settings, P.S. Cady, *et al.*, 91S;
- Evaluating Student Performance on Experiential Components of Education, R.R. Couris, 106S;
- Evaluation of a Certificate Program in Self Care for Pharmacy Practice, L.G. Suveges, *et al.*, 101S;
- Experiential (An) Education Evaluation System, L.E. Boh, *et al.*, 150S;
- Further (A) Evaluation of Supplemental Instruction in a Physical Pharmacy Course, B. Kelly and B. Sandmann, 71S;
- Relationship (The) Between the Timing of Preceptor Evaluation of the Student and the Student Evaluation of the Clinical Clerkship Preceptor: A Pilot Study, Karen J. Tietze, *et al.*, 78S;
- Examinations**
- Administration of an Objective Structured Clinical Examination (OSCE) to a Stratified Sample of Doctor of Pharmacy Students, K. Hill-Besinque and J. Noguchi, 134S;
- Oral Examinations in a Clinical Therapeutics Course, K. Hill-Besinque, 119S;
- Poor Student Performance on a Hospital Pharmacy Exam, K. Karnik and R. Rospond, 133S;
- Exchange Program**
- An International Pharmacy Student Exchange Program, R.J. Schollard, *et al.*, 154S;
- Expected (The) Impact of Managed Health Care Organizations on Pharmacy Education, K.H. Summers and A.K. Gumbhir, 13;
- Experiential**
- Continuing (A) Care Retirement Community (CCRC) as a Clinical Site for Geriatric Pharmacy Student, J.B. Plein and E.M. Plein, 117S;
- Development of Standardized Evaluation Forms for Use at Decentralized Doctor of Pharmacy Clerkship Sites, S.A. Scott and C.D. Black, 117S;
- Evaluating Student Performance on Experiential Components of Education, R.R. Couris, 106S;
- Experiential (An) Education Evaluation System, L.E. Boh, *et al.*, 150S;
- Implementation of a Self-Evaluated Experiential Component in a Pharmacy Communications Course, L. Lotz, *et al.*, 113S;
- Incorporating Home Health Care into Experiential Component of Education, R.R. Couris, 118S;
- Interactive (An) Relational Database (Infosite) to Facilitate Baccalaureate Pharmacy Students in Selection of Experiential Training Sites, T.A. Sajbel and K.E. Johnson, 148S;
- Survey of Experiential Programs: Course Competencies, Student Performance and Preceptor/Site Characteristics, L.E. Boh, M.E. Pitterle, F. Schneider and C.L. Collins, 105;
- Use of Experiential Teaching Methodologies in a Didactic Geriatrics Course, Karnik, *et al.*, 153S;
- Externship**
- Evaluation of Management Education in Externship Experiences, J.W. Wadelin and C. Krzyston, 103S;
- Externship Expectations Survey, J. McCombs, *et al.*, 132S;
- Externship (An) Manual Assuring Minimum Competencies While Encouraging the Development of Advanced Skills, M.L. Oed, 118S;
- Evaluation (An) of Externship Experiences Based Upon the NABPLEX Board Competencies, J.E. Berger, *et al.*, 124S;
- Fine Tuning of an Externship Experience, D. Nykamp, *et al.*, 118S;
- Incorporating Specialty Externships in Nuclear Pharmacy that Satisfy NRC Experiential Requirements for Authorized User Status, R.R. Couris and G. Matelli, 137S;
- Innovating Corporate Retail Pharmacy Management Externships: The Tennessee Experience, E.H. Clouse, *et al.*, 73S;
- Nontraditional Externship Rotations - Description and Evaluation, L. Selander and K. Russi, 148S;
- Patient Counseling: A Unique Externship Experience at a VA Medical Center, L.E. Basso and B. Lieberman, 136S;
- Practitioner's Assessment of the Externship Experience: A Retrospective Analysis, C. Aceves-Blumenthal and J.E. Stewart, 77S;
- Preceptor-Extern (A) Comparison Using Hall's Professionalism Scale, P.A. Robers and W.A. Kloesel, 104S;
- Review (A) of Externship Experience in Pharmacy Education, N.G. Popovich and L.E. Boh, 181;
- Student Expectations for and Importance of Selected Skills Experiences during the Pharmacy Externship Program, A.P. Wolfgang and T.L. Hageboeck, 74S;
- External Degree**
- Admission Criteria for the continuing Education Curriculum Option (External PharmD) Program at the University of Illinois at Chicago, J.C. Russell, *et al.*, 79S;
- Development and Validation of a Program



- Evaluation for External PharmD Degree Students, P.G. Grussing, *et al.*, 103S;  
 Enhancing Instructional Efficiency in an External Doctor of Pharmacy Degree Program Via Simulations, J.W. Blank, *et al.*, 69S;  
 Evolutional Development of an Externalized Doctor of Pharmacy Degree Program, J.C. Russell, *et al.*, 87S;  
 Laboratory Component for an External Doctor of Pharmacy Degree, A.A. Flynn and J.F. Fitzloff, 101S;  
 Market (A) Analysis for an External PharmD Degree, David J. Belsheim, 69S;  
 Predicting Demand for an External Degree Program/using the C-O-R Model of Adult Participation in Education, P. Lurvey and K. Kirk, 79S;

\*\*\*

#### FDA

- Adequacy of the FDA's Prescription to Nonprescription Switch Evaluation Criteria: An Empirical Investigation, S. Madhavan, 151S;  
 Facilitators and Barriers to Pharmacists' Participation in Lifelong Learning, Hanson and J.E. De Muth, 20;

#### Factors

- Factors Affecting Career Choice Decisions, J.L. Besier and R. Jang, 113S;  
 Factors Influencing Research Productivity as Perceived by Women Pharmacy Faculty, A.J. Matuszak, *et al.*, 108S;  
 Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students: A Two-Year Analysis, C. Aceves-Blumenthal, 135S;

- Facts Transmission to Reflective Action: Pharmacy Education as an Experiential Dialectic, C.H. Knowlton, 36S;

#### Faculties Chairman's Section

- A Challenge for Pharmacy Educators, G.A. Cochran, 91;  
 A Twenty Year Perspective, G.A. Cochran, 198;  
 A Wonderful Profession for Women???, M.K. Speedie, 40S;

#### Faculty

- Affiliate Faculty and Student Evaluation, Discipline and Dismissals, W.E. Fassett and S.G. Olswang, 211;  
 Analysis (An) of Potential Causes of Burnout and Stress Among Pharmacy School Faculty, C.W. Barnett, *et al.*, 126S;  
 Analysis (An) of Burnout Among Faculty of Schools of Pharmacy, R.A. Jackson, *et al.*, 128S;  
 Attitudes of Pharmacy Faculty Toward Regulation of Supplemental Income Activities, C.W. Barnett, *et al.*, 81S;  
 Clerkship Faculty Workloads in Entry Level PharmD Curricula, N.E. Kawahara, *et al.*, 116S;  
 Comparative Evaluations by Graduate Students and Faculty, H.L. Smith, *et al.*, 101S;  
 Computer Skills Development Project for Faculty and Academic Support Staff, P.A. Hovis and H.F. Cole, 70S;  
 Current Approaches and Perceived Barriers to Scholarship in Women Pharmacy Faculty, V.F. Roche, A.M. Haddad and A.J. Matuszak, 236;  
 Development and Motivation of a Volunteer Clinical Faculty, B.L. Sauer, 117S;  
 Development of a Formalized Orientation

- Program for Affiliate Clinical Faculty, S.A. Scott, *et al.*, 134S;  
 Development of an Introduction to Pharmacy Seminar Series for Nonpharmacist Faculty, M. Chitty, *et al.*, 152S;  
 Educational (An) Symposium Designed for Adjunct Faculty Development, E. Hassan and R.A. Kerr, 117S;  
 Faculty Development in Biotechnology via Industry Visitation, G.S. Chappell and P.J. Cascella, 56S, 149S;  
 Faculty: Protect Yourself from a Defamation Suit, K. Nerko and A. Bartilucci, 95S;  
 Fostering Computer Literacy Through the Use of Innovation Opinion Leaders, A. McKay, *et al.*, 70S;  
 How Do Pharmacy Faculty, PharmD and Undergraduate Fifth-Year Pharmacy Students View the "All PharmD" Degree?, N. Charupatanapong, 154S;

- Intensive Ethics Seminar for Pharmacy Faculty, A.M. Haddad, 132S;  
 Job Satisfaction of Pharmacy Faculty, C.W. Barnett, *et al.*, 91S;  
 Ohio State-Xavier Agreement for Graduate and Faculty Collaborative Ventures, Gerald, *et al.*, 123S;  
 Study (A) of Pharmacy Faculty Career Changes, C.W. Barnett, *et al.*, 143S;  
 Supplemental Income of Pharmacy Faculty: Participation in Pharmacy Related Income-Generating Activities, J.E. Murphy, *et al.*, 80S;

#### Family Practice

- Clinical Education in Family Practice, C.W. Weart and A.W. Karig, 75S;  
 Utilization of Doctor of Pharmacy Students for Refill Authorization in Family Practice Residency Training Program, R.G. Hefflinger, 147S;

#### Fellowship

- An Academic/Industrial Educational Network Through Fellowship Programs, M.A. Nemec, *et al.*, 105S;  
 Clinical (A) Research/Drug Development Fellowship as a Faculty Sabbatical Experience, S.R. Batey, *et al.*, 85S;  
 Comparison of Drug Research and Development Experience Gained in Two Postdoctoral Academic-Industrial Clinical Pharmacy Fellowships, J. Barone, *et al.*, 84S;  
 Multidisciplinary Approach in Offering Postdoctoral Fellowship in Pediatric Infectious Disease Therapy, M.C. Nahata, 85S;  
 Scholarly Activities Associated with a Postdoctoral Industrial Fellowship, Foster and J.A. Barone, 107S;

#### Finance

- Analysis of Financial Support Provided for Continuing Education in the Institutional Practice of Pharmacy, R.R. Couris and V.W. Bernardi, 87S;  
 Chair Report for the Committee on Finance, N.G. Popovich, 19S;  
 Comparison (A) of Computer-Simulation and Traditional Methods for Teaching Management to Pharmacists, K.A. Lawson, *et al.*, 109S;  
 Services Offered by Arkansas Community Pharmacies and Actions Likely to be Taken if the Estimated Acquisition Cost (EAC) Proposed by the Health Care Financing Administration (HCFA) is Implemented, J.R. McCormack, 128S;  
 Using a Computer-Simulation Program and a Traditional Approach to Teach Pharmacy

- Financial Management, K.A. Lawson, M.D. Shepherd and V.R. Gardner, 226;

#### Foreign Students

- Condensed (A) Pharmacy Curriculum for Foreign Graduates with Specific Emphasis on the Vietnamese Refugee, R.L. Day, 75S;  
 Preceptor Perceptions of the Communication Skills of Non-Native First-Year Pharmacy Students, K.A. Johnson and B.D. Seal, 77S;  
 Special (A) Communication Course for Non-Native English-Speaking Students, R.S. Beardsley, 71S;

#### Formulary

- Loading Costs Versus Acquisition Costs — Formulary Impact, Z.T. Grapes, 85S;  
 Modelling Drug Formulary Decisions, M.L. Greer, 104S;  
 Formulating Capital Investment Decisions with Monte Carlo Simulation, D.A. Sclar, 152;

\*\*\*

#### GAPS Abstracts

- Abstracts from Grant Awards to Pharmacy Schools (GAPS), 55S, 149S;

#### Gender

- Changing Attitudes of Pharmacy Graduates on Gender-Related Issues, L. Muzzin, *et al.*, 147S;  
 Gender Differences in Pharmacy Students' Attitudes Toward Patient Counseling, B.L. Svarstad and P. Ranelli, 73S;  
 The Relationship of Gender to Ease of Patient Counseling, S.B. Beck, *et al.*, 125S;  
 Variables Influencing the Labor Force Attachment of Male and Female Pharmacists, P. Lurvey, 131S;

#### Generic

- Consumer Perceptions of Quality and Value of Brand Name and Generic Oral Contraceptive Drug Products, D.P. Zgarrrick, *et al.*, 142S;

#### Geriatric

- Attitudes of Pharmacists Toward the Elderly, D.R. Croteau, *et al.*, 113, 129S;  
 Certificate Program in Geriatric Pharmacy for Pharmacists and Pharmacy Students, B. Adamcik, *et al.*, 123S;  
 Comprehensive (A) Integrated Geriatrics Curriculum for Pharmacy Students and Practicing Pharmacists, B.M. Schechter, *et al.*, 131S;  
 Continuing (A) Care Retirement Community (CCRC) as a Clinical Site for Geriatric Pharmacy Student, J.B. Plein and E.M. Plein, 117S;  
 Certificate (A) Program in Development of a Comprehensive Geriatrics Curriculum for Student Pharmacists, B.R. Williams, *et al.*, 132S;  
 Development of a Geriatric Pharmacy Mini-Residency Program, G.M. McCart, *et al.*, 109S;  
 Easing Medication Administration in Ambulatory Geriatric Population by Use of Compliance Packaging, D.A. Pass and W.G. Erwin, 149S;  
 Educational (An) Module: Informing Older Consumers about Generic Medications, M. Perri and A. Wolfgang, 113S;  
 Elderly Patients Admitted Through Emergency Departments - General Medicine or Geriatric Medicine?, M.R. Yakabowich, 95S  
 Enrollment of Elderly Patients in Pharmacokinetic Studies, M.B. Burlingame and B. Ameer, 94S

- Evaluation of a Curriculum Development Project in Geriatric Pharmacy at the University of Arkansas for Medical Sciences College of Pharmacy: Problems and Possible Solutions, J. Garrett, 76S;
- Evaluation of a Geriatrics Continuing Education Program, L.D. Ried and T.E. Vorce-West, 87S;
- Evolution of a Certificate Program in Geriatric Pharmacy Practice, T.E. Vorce-West and W. Simonson, 125S;
- Five-Year (A) Study of Geriatric Pharmacy Practice Courses Offered and Utilization of the Pharmacy Practice for the Geriatric Patient Textbook by Canadian and American Schools of Pharmacy, C.H. Brown, 149S;
- Geriatric Pharmacy Education, J.B. Plein, *et al.*, 116S;
- Joint AHEC Program to Develop Medication Teaching Program for the Elderly, Hurford and R.J. Cluxton Jr., 76S;
- Medication (The) Information Line for the Elderly, R.E. Grymonpre and J.W. Steele, 122S;
- Multidisciplinary (A) Clinical Experience in a Memory and Alzheimers Clinic, R. Finley, 119S;
- Pilot Study to Determine Sources and Satisfaction of Drug Information for the Elderly, H.M. Anderson-Harper, *et al.*, 114S;
- Self-Study Modules for Training Pharmacy Educators and Practitioners in Geriatrics, W.J. Falbe, *et al.*, 101S;
- Students' Attitudes Toward and Knowledge of Aging and Geriatric Nursing Home Patients Before and After a Clinical Rotation, S.W. Miller, R.K. Miyahara, 147S;
- The Teaching Nursing Home: An Elective Geriatric Clerkship, Susan W. Miller, 78S;
- Use of Experiential Teaching Methodologies in a Didactic Geriatrics Course, K. Karnik, *et al.*, 153S;
- Use of Practitioner Input to Develop Content for a Core Parenteral Products/IV Therapy Course, S.A. Scott and P.R. Burns, 136S;
- Parental Course
- Glaxo Pathway Program
- Career Decision-Making Process: The Glaxo Pathway Evaluation Program-Pharmacy Professionals, E.M. Sogol, 111S;
- Graduate Education
- Assessing the Interests of Practitioners in Pharmacy Administration Graduate Education with Management Focus, W.T. Sharp and B. Adamcik, 90S;
- Comparative Seminar Evaluations by PharmD and Graduate Students, H.L. Smith, *et al.*, 110S;
- Curriculum-Based (A) Approach to Recruiting Undergraduate Pharmacy Students for Graduate Research Careers, L.T. Welch, 107S;
- Factors Determining Pharmacy Students' Intentions of Pursuing Graduate Education, J. Draugalis, *et al.*, 104S;
- Graduate (A) Seminar Course Focused on Presentation Skills, T.A. Shepard, 110S;
- Graduate Studies in Pharmacoeconomics and Drug Policy, A.S. Stergachis and D.B. Christensen, 155S;
- Marketing Health Care Education: Applying the Marketing Concept to a MS in Pharmacy Administration, R. Sparkman Jr., 73S;
- Practitioner Interest in Postgraduate Study in Pharmacy Administration, T.L. Hageboeck and A.P. Wolfgang, 74S;
- Preparing Graduate Students for Teaching in Pharmacy Schools, N.G. Popovich and H.L. Mason, 96S;
- Protein Chemistry: A Graduate Course in Pharmaceutical Biotechnology at the University of Kansas, M.C. Manning and J.W. Mitchell, 52;
- Relative (The) Stability of Graduate Programs in Pharmacy Administration, A. Schwartz, 75S;
- Graduates
- Changing Attitudes of Pharmacy Graduates on Gender-Related Issues, L. Muzzin, *et al.*, 147S;
- Comparison of Career Choices of PharmD vs. BS Graduates of the University of Illinois at Chicago, N. Fjortoft, *et al.*, 131S;
- Follow-Up (A) of Recent Pharmacy Graduates with Hall's Professionalism Scale, P.A. Robers, 113S;
- Guided Design
- Application of Therapeutic Drug Utilization Review: A Guided Instructional Module for Pharmacy Educators, W.G. Erwin, *et al.*, 134S;
- Development and Evaluation of Computer-Assisted Guided Design for Problem Solving in Self-Care Pharmacy Practice, G.D. Newton, N.G. Popovich and J.D. Lehman, 301;
- Experience and Observations About the Guided Design Instructional Methodology, S.M. Pawlak and N.G. Popovich, 118S;
- \*\*\*
- HIV — Who Will Save the Children? A.M. Bolinger, 143;
- HMO
- Expected (The) Impact of Managed Health Care Organizations on Pharmacy Education, K.H. Summers and A.K. Gumbhir, 13;
- Organization (The) and Use of HMO Data Systems for Pharmacy Research at Group Health Cooperative, A. Stergachis and P.M. Penna, 93S;
- Habits
- Personal Development in the Academic Institution: A Program for Students and Faculty using Stephen Covey's Seven Habits of Highly Effective People, R.E. Smith, *et al.*, 153S;
- Hall's Professionalism Scale
- A Follow-Up of Recent Pharmacy Graduates with Hall's Professionalism Scale, P.A. Robers, 113S;
- Health
- An Assessment of Pharmacy Students' Health-Related Attitudes and Beliefs, S.J. Coons and J. Draugalis, 111S;
- Cognitive Changes in Adults: Effects on Communicating Health Information, J. Novak, 105S;
- Development (The) and Evaluation of a Pharmacy and Health Care Course, D.M. Scott and D.L. Arneson, 103S;
- Development of a Clinical Research Unit Using an On-Campus Student Health Center, J.A. Barone, *et al.*, 84S;
- First Year Pharmacy Students' Knowledge of the U.S. Health Care System, Phillips, 104S;
- Health Services Research: Its Scope and Significance, D.M. Steinwachs, 274;
- Health Professions Education for Year 2001, R.H. Ebert, 357;
- Human Resources for Health: Preparing for Tomorrow, H.S. Desmarais, 267;
- International Health Issues: An Elective Course, M.F. Harris, 73S;
- Marketing Health Care Education: Applying the Marketing Concept to a MS in Pharmacy Administration, R. Sparkman Jr., 73S;
- Predictive Validity of Health Belief and Locus of Control Concepts on Nonadherence Behavior, S.K. Elliott, 141S;
- Provision (The) of Health Care in the Home-towns of Senior Pharmacy Students, J.R. McCormack, 128S;
- Using the Information in DNA to Improve Health Care, G.F. McGregor, 70S;
- Women's Health Care Elective, J. McCombs, 97S
- Hemodialysis
- Chronic Hemodialysis Unit as a Clinical Pharmacy Teaching Site, A. Lau and Tang, 116S;
- High School
- Teaching High School Chemistry Students about Pharmacy, J.I. Mackowiak, 93S;
- History
- Student Research Projects in a History of Pharmacy Course: A Means of Teaching Communication Skills, A.J. Matuszak, 93S;
- Home Care
- Clinical (The) Pharmacist as a Home Care Provider, D.M. Stewart and R.L. Ferrando, 77S;
- Development (The) of a Home Health Care Clerkship, C.E. Rowe, 77S;
- Incorporating Home Health Care into Experiential Component of Education, R.R. Couris, 118S;
- Teaching and Consulting in a Home Health Care Agency, S. Lorentz and D.S. Adler, 77S;
- Home Study
- A Preliminary Study to Determine the Amount of Continuing Education Credit to Award for Home Study Programs, M.A. Mergener, 263;
- Live Lecture Versus Home Study: Evaluation of the Educational Effect of an Identical CE Program Delivered by Two Formats, E.M. Sogol, *et al.*, 87S;
- Honors
- Honors Seminar as a Mechanism to Stimulate Undergraduate Research, A. McKay, 127S;
- The Pharmaceutical Industry and Honors Education: A Winning Combination, J.M. Lausier, 101S;
- Hospital
- Decision Analysis Model for Hospital Pharmacy Purchasing Group Participation, G.E. Bass, *et al.*, 103S;
- Description of a Clerkship in Hospital Quality Assurance/Drug Usage Evaluation Activities, J.P. Thornton and A.L. Spunt, 106S;
- Development (The) and Implementation of Consultative Services to a State Hospital for the Mentally Retarded or Developmentally Disabled, C.D. Ponte, *et al.*, 96S;
- Incorporation of Simulated Hospital and Community Practice Environments in a Pharmacy Practice Laboratory, J. Triplett and C. Aceves-Blumenthal, 118S;
- Leadership (The) Orientations of Hospital Pharmacy Directors: Implications of an Empirical Study for Graduate Course Content, T. Reutzel, *et al.*, 142S;
- Pharmaceutical Services in the Nation's Teaching Hospitals, C.A. Bond, *et al.*, 144S;
- Problems (The) of Hospital Pharmacy Directors, S. Seoka, 131S;
- House of Delegates

- Minutes of the House of Delegates Sessions and Awards Banquet, July 7-10, 1991, C.E. Trinca, 52S;
- Human Resources for Health: Preparing for Tomorrow, H.S. Desmarais, 267;
- Human Values  
Teaching Human Values in Pharmacy Education: Case Studies from the Classroom and Hospital, S. Poirier, 84;
- \* \* \*
- Impact of Relicensure Prerequisites on Pharmacist Preferences and Utilization of Continuing Education, B.L. Jones, *et al.*, 87S;
- Impairment  
Coordinating the Care of Chemically Dependent Pharmacy Students Through a Statewide Recovery Network, D.W. Teat and T.J. Ives, 142S;  
Need (The) for University Implemented Policies Regarding Drug Impaired Pharmacy Students, S.L. Szeinback, *et al.*, 124S;  
Pharmacist Impairment: Risks Management and Prevention, K.M. D'Achille, *et al.*, 87S;  
Symptoms Associated with Drinking and other Drug Use and Use of Helping Resources by Pharmacy Students, C. Stock, 134S;
- Income  
Attitudes of Pharmacy Faculty Toward Regulation of Supplemental Income Activities, C.W. Barnett, *et al.*, 81S;  
Factors Related to Pharmaceutical Scientists' Income and Job Satisfaction, S.M. Speedie, *et al.*, 104S;  
Supplemental Income of Pharmacy Faculty: Participation in Pharmacy Related Income-Generating Activities, J.E. Murphy, *et al.*, 80S;
- Indian Health Service  
Clerkship Experiences in Indian Health Service Facilities in Oklahoma, N.R. Morris, *et al.*, 116S;
- Influence and Leverage, J.L. Cohen, 404;
- Information  
Medication (The) Information Line for the Elderly, R.E. Grymonpre and J.W. Steele, 122S;  
Teaching Use of *Current Contents* by Computer-Assisted Instruction, R.J. Cluxton, *et al.*, 89S;  
Using a Microcomputer-Based System to Teach the Principles of Online Computerized Information Retrieval, C.M. Rienke, 89S;
- Instruction  
Activity Analysis of Clerkship Instruction, D.E. Beck and D. McMillan, 131S;  
Application of Therapeutic Drug Utilization Review: A Guided Instructional Module for Pharmacy Educators, W.G. Erwin, *et al.*, 134S;  
Computer-Assisted Instruction (CAI) for Medicinal Chemistry. Acid-Base Properties and Solubility of Drugs, R.L. Jacoby, 138S;  
Effect (The) of Experience and Instruction on Students' Recognitions, Judgments, and Decisions Concerning Drug Side Effects, M.K. Slack and Larson, 129S;  
Evaluation of Supplemental Instruction Program in Medicinal Chemistry at the College of Pharmacy, University of Illinois at Chicago, N. Fjortoft, *et al.*, 152S;  
Experience and Observations About the Guided Design Instructional Methodology, S.M. Pawlak and N.G. Popovich, 118S;  
Initial Evaluation of a Problem-Based Format for Nonprescription Therapeutics Instruction, W.J. Falbe, *et al.*, 132S;  
Initial Evaluation of a Problem-Solving Format for Therapeutics Instruction: A Continuum from Nonprescription Therapeutics, R.W. Sommi and Patricia A. Marken, 148S;  
Microwave Therapeutics (Or Therapeutics Instruction Incorporating Off-Campus Faculty), T. Gould and B. Mason, 132S;  
Pharmacy Instruction in Oncology: Results of a National Survey, R.J. Cersosimo, 107S;  
Use of Computer-Assisted Instruction to Review Microbiology and Antimicrobial Agents, P.L. Carver, J.C. Novak and E.M. Harris, 248;
- Instructors  
Extended Offerings of Certificate Programs Through Training of Off-Campus Instructors, R.A. Carter, *et al.*, 138S;  
Training Program for Community Pharmacy Clerkship Instructors, M.P. Pevonka and M.A. Lemberger, 69S;
- Integration  
Integration of Ethics in Course Content Across the Curriculum, V. Giannetti, *et al.*, 154S;  
Liberal Studies and the Pharmacy Curriculum: The Importance of Integration, S.M. Dumbleton and J.K. Soleau, 59;
- Interaction  
Comparison and Evaluation of Eight Drug to Food/Nutrient Interaction Programs, R.A. Giudici and T.I. Poirier, 144S;
- International  
International Health Issues: An Elective Course, M.F. Harris, 73S;  
International (An) Pharmacy Student Exchange Program, R.J. Schollard, *et al.*, 154S;
- Intravenous Therapy  
The Status of Home Intravenous Therapy Instruction Provided by U.S. Schools and Colleges of Pharmacy, M.R. Monk, T.R. Brown, D.D. Garner and M.C. Smith, 120;
- Inventory  
A Teaching Model on Purchasing and Inventory Control, M.R. Lahoz and R.O. Nickel, 131S;
- It's Not *What* You Know, But *How* You Know, J.A. Bell, 383;
- \* \* \*
- Job  
Comparison (A) of Three Degree Options in Influence Upon Pharmacists' Job Satisfaction and Work Activities, C.W. Barnett and H.W. Matthews, 143S;  
Correlation of First Pharmacy Job Choice with Personality Factors, K.M. Olseny and N.S. Latman, 85S;  
Explanations of Job and Professional Satisfaction and Dissatisfaction, D.A. Ralph and M. Langenbach, 73S;  
Factors Related to Pharmaceutical Scientists' Income and Job Satisfaction, S.M. Speedie, *et al.*, 104S; Job Satisfaction of Pharmacy Faculty, C.W. Barnett, *et al.*, 91S;  
Job Activities and Practice Patterns of Entry Level PharmD and BS Graduates, F.M. Cox and N.V. Carroll, 91S;  
Relationships Between Student Personality, Intended Practice Area and Satisfaction with Pharmacy as a Choice of Career, M.S. Ortiz and A.P. Wolfgang, 92S;
- \* \* \*
- Labelling  
A Pilot Study of Dual Language Labeling in English and Vietnamese, W.E. Fassett, *et al.*, 75S;
- Laboratory  
Computer-Aided In Vitro Pharmacokinetic System as a Teaching Model for Undergraduate Pharmaceutics Laboratory Use, H.A. Yun, *et al.*, 110S;  
Controlling Resource Use in a Pharmacology Laboratory Through the Use of Computer Simulation, M.A. Vance and T.L. Hageboeck, 152S;  
Development and Implementation of Practice-Oriented Laboratory Activities, S.M. Pawlak, 117S;  
Development of a Comprehensive Community Pharmacy Computer Teaching Laboratory, L.V. Allen Jr. and M.L. Stiles, 69S;  
Development (The) of an Undergraduate Laboratory Course and Research Rotation, W.T. Harris, *et al.*, 99S;  
Implementation of Microcomputers in Pharmacy Laboratories for Computer-Based Training, L.J. Shapiroy, 73S;  
Laboratory Component for an External Doctor of Pharmacy Degree, A.A. Flynn and J.F. Fitzloff, 101S;  
New (A) Approach to the Pharmacology Laboratory Course: Teaching for Lifetime Learning, D.M. Sylvester and T.P. LaHann, 107S;  
Pharmaceutical Sciences Laboratory, G.S. Chappell, *et al.*, 138S;  
Practical (A) and Clinical Approach to Basic Pharmaceutics Laboratory Instruction at Duquesne University, R.A. Giudici, 102S;
- Language Skills  
Evaluation and Improvement of the Language Proficiency of Pharmacy Students, Barnett, *et al.*, 73S;
- Law  
Business (A) Law Course in the Community Pharmacy Track Sequence at the University of Southern California School of Pharmacy, F.G. Weissman, *et al.*, 151S;  
Development of Instruments to Evaluate the Florida Self-Care Consultant Law, B.A. Bulfer, 103S;
- Learning  
Assessment (An) of Pharmacy Students' Learning Strategies, B. Adamcik, *et al.*, 111S;  
Comparison (A) of the Learning Styles of Students, Faculty and Practitioners: Implications for Continuing Education, D.A. Riley, 69S;  
Development of a Pharmacy-Based How To Learn How to Study Program, Z.T. Grapes and D. Whordley, 72S;  
Effectiveness (The) of Advance Organizers in Improving Pharmacy Students' Conceptual Learning, R.A. Schulz and S.M. Rodman, 75S;
- Lecture Aids  
Microcomputer-Based Preparation of Lecture Aids, J.G. Henkel, 78S;
- Letters, 93, 283, 407;
- Library  
Cost (The) Effectiveness of Combining Computer-Library-Media Services in a School of Pharmacy, E.C. Jackson, *et al.*, 123S;  
Environmental Issues in Chemistry: Bibliographic Instruction Through a Faculty-Librarian Partnership, M.S. Pearson, 139S;  
Integration of Library Resources Throughout a Five-Year Pharmacy Curriculum, I.P. Kaplan, *et al.*, 140S;



- Integration of Library Skills Throughout the Curriculum at the St. Louis College of Pharmacy, J.A. Longstreth, 139S;
- Integration of Library Resources into the Pharmaceutics Curriculum, B.S. Reiss, 140S;
- Sharing the Future: Issues and Problems in a Library Consortium, M. Adams, 110S;
- Licensing**
- Descriptive (A) Analysis Between a Nonmandatory and a Mandatory Licensing Period for Pharmacy Continuing Education Offering in Nebraska, M.F. Sylvestri and J.E. Van Arsdall, *et al.*, 100S;
- Human Resources Policy and the Education of Future Health Professionals: Report of an AHC/FASHP Retreat, G.H. Cocolas, and E. Rubin, 399;
- Life Experiences**
- A Process to Validate Life Experiences for Credit Toward Clerkship Rotations, C. Aceves-Blumenthal, 151;
- Lifelong Learning**
- Facilitators and Barriers to Pharmacists' Participation in Lifelong Learning, A.L. Hanson and J.E. De Muth, 20;
- Predicting Pharmacists' Behavior as Lifelong Learners, A.L. Hanson and J.E. De Muth, 139S;
- Lifestyle**
- A Study of the Career, Marital and Lifestyle Aspirations of Pharmacy Students, K.A. Speranza Sr. and C.L. Vieweg, 115S;
- Literature Evaluation**
- Adaptation of Didactic Drug Literature Evaluation Course for a Flexible PharmD Program, J. Elgert-Madison, *et al.*, 75S;
- Self-Paced (A) Learning Module in Drug Literature Evaluation, B.S. Miller and G.H. Smith, 94S;
- Student-Centered (A) Approach for Teaching Drug Information and Literature Evaluation, G.J. Vanscoy, *et al.*, 140S;
- Structured (A) Review of Pharmacy Quality Assurance Literature, A.L. Ilersich, *et al.*, 123S;
- Literature Search**
- Alternative Literature Searching Methods, W.K. Fant, *et al.*, 70S;
- Changes in an Elective Course in Pharmaceutical Literature Since the Introduction of CD-ROM Databases in a School of Pharmacy, E.C. Jackson, 125S;
- Computer Literature Searching in an Acute Medicine Clerkship, J.K. Noguchi, *et al.*, 88S;
- Survey of Pharmacists' Involvement in AIDS Education and an Inventory of Educational Materials in Maryland Pharmacies, L. Burton, *et al.*, 105S;
- Loading Costs**
- Computer Simulated Model to Quantify the Loading Costs of Pharmaceuticals, Grapes, 82S;
- Loading Costs Versus Acquisition Costs — Formulary Impact, Z.T. Grapes, 85S;
- Long Term Care**
- Comparison (A) of Incidence and Prevalence Studies of Drug Use in Long Term Care Facilities, F.B. Palumbo, *et al.*, 71S;
- Development of Long-Term Care Pharmacy Skills Through a One-Year Postbaccalaureate Residency Program, L.A. Finn, *et al.*, 76S;
- Longitudinal (A) Study of Attitude Change in Pharmacy Students During School and Post Graduation, M.C. Smith, J.E. Fincham and S. Messer, 30
- \* \* \*
- Management**
- Assessing the Interests of Practitioners in Pharmacy Administration Graduate Education with Management Focus, W.T. Sharp and B. Adamcik, 90S;
- Determining Managerial Education and Training Needs of Pharmacy Owners and Managers, M.D. Smalley, *et al.*, 109S;
- Development of a Course in the Marketing and Management of Pharmaceutical Services, A. Schwartz and E.M. Sogol, 90S;
- Development of Spreadsheet Analytical Techniques in a Pharmacy Management Course, W.T. Sharp, 103S;
- Development of Student Decision Making Ability via Data Base Management on the IBM-PC, R. Jang, 72S;
- Evaluation of Management Education in Externship Experiences, J.W. Wadelin and C. Krzyston, 103S;
- Impact of a Corporate Pharmacy Management Externship on Student Attitudes Toward Chain Pharmacy, E.H. Clouse, 82S;
- Innovating Corporate Retail Pharmacy Management Externships: The Tennessee Experience, E.H. Clouse, *et al.*, 73S;
- Integrating Basic Management and Marketing into a College of Pharmacy Curriculum, E.H. Clouse, *et al.*, 92S;
- Introducing Principles of "Total Quality Management" to Schools of Pharmacy and Higher Education, L.L. Maine, 151S;
- Microcomputers Retail Pharmacy Management Support: An Integrated Heuristic Model, G.E. Bass, 74S;
- Mobility and Management Patterns in Pharmacy Career Histories of Male and Female Pharmacists, P. Lurvey, 129S;
- Pharmacy Management by the Case Study Method, M. Perri III and J.A. McMillan, 92S;
- Required (A) Basic Management Course Developed and Implemented by Pharmacy Practitioners, R.E. Smith and R.J. Hospodka, 80S;
- Selective Contracting with Third Party Drug Programs: Implications for Pharmacy Management Decision Making, L.N. Larson, 81S;
- Teaching Applications of a Microcomputer-Based Hospital Pharmacy Management System, F.M. Cox and T.E. Steed, 96S;
- Mandatory**
- Descriptive (A) Analysis Between a Nonmandatory and a Mandatory Licensing Period for Pharmacy Continuing Education Offering in Nebraska, M.F. Sylvestri and J.E. Van Arsdall, *et al.*, 100S;
- Descriptive (A) Analysis of Program Selection by Pharmacists to Meet Mandatory Continuing Education Requirements in Michigan, W.D. Hardigan, 109S;
- Manpower**
- Demand for Pharmacists in North Carolina, W.P. Johnston, *et al.*, 112S;
- Issues in Pharmacy Manpower Assessment: Results from a Statewide Survey, P.D. Hurd, *et al.*, 82S;
- Variables Influencing the Labor Force Attachment of Male and Female Pharmacists, P. Lurvey, 131S;
- Manual**
- An Externship Manual Assuring Minimum Competencies While Encouraging the Development of Advanced Skills, M.L. Oed, 118S;
- Marketing**
- Assessing Pharmacists' Needs for Marketing-Related Knowledge and Skills, M.T. Rupp and B.A. Szkudlarek, 126S;
- Continuing Education Market Segments for Pharmacists, G.R. Donehew, *et al.*, 124S;
- Development of a Course in the Marketing and Management of Pharmaceutical Services, A. Schwartz and E.M. Sogol, 90S;
- Developing Content for a Strategic Marketing Module Using a Delphi Technique, J.H. Phillips and F. Trainor, 112S;
- Integrating Basic Management and Marketing into a College of Pharmacy Curriculum, E.H. Clouse, *et al.*, 92S;
- Market (A) Analysis for an External PharmD Degree, D.J. Belsham, 69S;
- Marketing Health Care Education: Applying the Marketing Concept to a MS in Pharmacy Administration, R. Sparkman Jr., 73S;
- Marketing Pharmacy Services via the Individual Pharmacist, N. Ahmad and R. Jang, 73S;
- Pharmaceutical Product Managers in a Marketing Case Studies Course, N.D. Crane and R. Jang, 82S;
- Perceived Needs of Recent Graduates for Marketing-Related Knowledge and Skills: Implications for Pharmacy Education, M.T. Rupp and B.A. Szkudlarek, 6;
- Spreadsheet (A) Adaptation of a Market Based Pricing Model, D.B. Christensen, and W.E. Fasset, 91S;
- Media Departments**
- Comprehensive (A) Survey of Media Departments Servicing U.S. Schools of Pharmacy, D.K. Johnson, *et al.*, 140S;
- Medical Center**
- Patient Counseling: A Unique Externship Experience at a VA Medical Center, L.E. Basso and B. Lieberman, 136S;
- Medical Devices**
- Description and Evaluation of a Course in Medical Devices and Equipment, M.E. Gardner, *et al.*, 85S;
- Medication**
- Consumer Satisfaction with Source of Prescription Medications: A Telephone Survey, H.A. Smith and S.J. Coons, 126S;
- Easing Medication Administration in Ambulatory Geriatric Population by Use of Compliance Packaging, D.A. Pass and W.G. Erwin, 149S;
- Medication Group as a Teaching Module in Psychiatric Clinical Clerkship, A.A. Cardoni, 119S;
- Medication Noncompliance: A Didactic Exercise, A.G. Hartzema and L.P. O'Brien, 114S;
- Medication History**
- Pharmacoepidemiology Data Derived from Medication Histories, S.R. Batey, *et al.*, 95S;
- Teaching a Medication-History-Interviewing Model to Pharmacy Students, P.L. Ranelli, 105S;
- Medicinal Chemistry**
- CAI in Medicinal Chemistry: How Far Can We Go?, W. Fant, *et al.*, 87S;
- Computer-Assisted Instruction (CAI) for Medicinal Chemistry. Acid-Base Properties and Solubility of Drugs, R.L. Jacoby, 138S;



- Evaluation of Supplemental Instruction Program in Medicinal Chemistry at the College of Pharmacy, University of Illinois at Chicago, N. Fjortoft, *et al.*, 152S;
- Longitudinal (A) Study to Assess Prerequisite Skills for Medicinal Chemistry Courses, J. Garrett, *et al.*, 110S;
- Prepharmacy Chemistry Courses as Preparation for Medicinal Chemistry, J.M. Chapman, *et al.*, 86S;
- MEDLINE**
- Teaching Medline Searching to Doctor of Pharmacy Students Using Two Different End-User Systems, B.S. Brizuela and J.A. Hesp, 140S;
- Two Programs to Convert Medline Offprint Files for Storage in Microcomputer Database Management Systems, W.E. Fassett, 89S;
- Meet the President: Nicholas G. Popovich, G.H. Cocolas, 209;
- Mental Illness**
- Educational Assessment of In-Service Training for the Medical Staff of a State Mental Institution, C.D. Ponte and B.T. Lively, 106S;
- Students' Attitudes Toward the Mentally Ill Before and After Clinical Rotations D.M. Jermain and M. L. Crismon, 45, 133S;
- Meta-Analysis**
- Meta-Analytic (A) Study of Clinical Pharmacokinetic Service Evaluations, L.D. Ried, *et al.*, 104S;
- Meta-Analysis (A) of a Literature Review on Reducing Communication Apprehension, D.A. Riley, 142S;
- Meta-Analysis (A) of Medication Compliance Studies, R.S. Pippalla and D.A. Riley, 143S;
- Microbiology**
- Biotechnology and Microbiology for Pharmacy Majors at Ohio Northern University, M.L. Mallin, 99S;
- Computer-Assisted Instruction: A Review of Microbiology and Antimicrobial Agents, P.L. Carver, *et al.*, 110S;
- Use of Computer-Assisted Instruction to Review Microbiology and Antimicrobial Agents, P.L. Carver, J.C. Novak and E.M. Harris, 248;
- Microwave**
- Microwave Therapeutics (Or Therapeutics Instruction Incorporating Off-Campus Faculty), T. Gould and B. Mason, 132S;
- Minority**
- Increasing Minority Student Contact with Colleges of Pharmacy, S.G. Hoag, 149S;
- Predictors of Academic Success Among Black Students in a School of Pharmacy, W.T. Sharp, *et al.*, 74S;
- Minutes**
- 92nd Annual Meeting of the American Association of Colleges of Pharmacy, July 7-10, 1991, C.E. Trinca, 51S;
- AACP Board of Directors Meeting October 26-27, 1990, New Orleans, LA, C.E. Trinca, 36S;
- February 27-28 1991, Washington, DC, C.E. Trinca, 40S;
- July 4-5, 1991, Boston, MA, C.E. Trinca, 43S;
- October 25-26, 1991, Baltimore, MD, C.E. Trinca, 47S;
- Annual Meeting of the Directors of the American Foundation for Pharmaceutical Education, R.E. Faust, 191;
- Council of Facilities Business Meeting: July 8, 1990, Boston, MA, R.B. Stewart, 53S;
- House of Delegates Sessions and Awards Banquet, July 7-10, 1991, C.E. Trinca, 52S;
- Mission Statement**
- The Mission of Pharmacy Education, M. Smith, 81S;
- Module**
- Application of Therapeutic Drug Utilization Review: A Guided Instructional Module for Pharmacy Educators, W.G. Erwin, *et al.*, 134S;
- Self-Paced (A) Learning Module in Drug Literature Evaluation, B.S. Miller and G.H. Smith, 94S;
- Molecular Graphics**
- The Use of Microcomputer-Based Molecular Graphics in Teaching Medicinal Chemistry, J.G. Henkel, 68S;
- Moral Judgement and Cognitive Personality Characteristics of Beginning PharmD Students**, D. Dolinsky, *et al.*, 74S;
- Multidisciplinary**
- Multidisciplinary (A) Approach to Teaching Pharmacy Students, Michael B. Nichol, 369;
- Multidisciplinary (A) Clinical Experience in a Memory and Alzheimers Clinic, R. Finley, 119S;
- Teaching Clerkships in a Multidisciplinary Epilepsy Ambulatory Care and Research Clinical, M.L. Wagner and R.C.S. Sachdeo, 146S;
- Myers-Briggs**
- Contribution of Myers-Briggs Personality Preferences to Better Scholarship in Pharmacy, W. Lowenthal and H. Meth, 101S;
- \* \* \*
- NABPLEX**
- Evaluation (An) of Externship Experiences Based Upon the NABPLEX Board Competencies, J.E. Berger, *et al.*, 124S;
- Relationship Between Pre- and Post-Admission Variables on Pharmacy Student Performance and on NABPLEX Scores: Demographic Variables, C.M. Monk, *et al.*, 115S;
- National Survey**
- National (A) Pharmacy Survey of the Availability of Hardware Required for Continuing Education Delivery Systems J.E. De Muth, 36;
- Pharmacy Instruction in Oncology: Results of a National Survey, R.J. Cersosimo, 107S;
- New Books, 104, 208, 297;
- New Investigator Program**
- Adequacy of the FDA's Prescription to Nonprescription Switch Evaluation Criteria: An Empirical Investigation, S. Madhavan, 151S;
- Neuropeptide Induced Alterations of Respiration Function, T. LaHann and G. Daniell, 150S;
- Noncompliance**
- Medication Noncompliance: A Didactic Exercise, A.G. Hartzema and L.P. O'Brien, 114S;
- Nontraditional**
- Characteristics of Pharmacists Choosing a Nontraditional Graduate Degree in Pharmacy Administration, P.D. Hurd and D.R. Rickert, 90S;
- Development and Evaluation of a Pharmacology Course for a Nontraditional PharmD Curriculum, A. Flynn and N. Katz, 139S;
- Idaho (The) State University Nontraditional PharmD Program, V.L. Culbertson, 137S;
- Nontraditional Externship Rotations - Description and Evaluation, L. Selander and K. Russi, 148S;
- Nontraditional PharmD Students: Continuation Curriculum Option Enrollment Profile at UIC, A.A. Flynn, *et al.*, 137S;
- Role of the Practitioner Advocate in a Nontraditional PharmD Program, A.A. Flynn, *et al.*, 110S;
- Not All Over-The-Counter Drugs Are Safe, N.G. Popovich, 166;
- Nuclear Pharmacy**
- Incorporating Specialty Externships in Nuclear Pharmacy that Satisfy NRC Experiential Requirements for Authorized User Status, R.R. Couris, G. Matelli, 137S;
- Nursing**
- PharmD Physical Assessment Workshop Taught by Nursing Faculty: Student Perception of Utility, R.A. Carter and D. Kauffman, 96S
- Nursing Home**
- The Teaching Nursing Home: An Elective Geriatric Clerkship, Susan W. Miller, 78S;
- Nutrition**
- Assessment of Nutrition Knowledge and Attitudes of Pharmacy and Medical Students, K.M. Olsen and B.J. McCabe, 105S;
- Nutrition and Diet Therapy for Pharmacy Students, W.J. Murray and P.W. Jungnickel, 119S;
- \* \* \*
- OTC**
- Appropriateness of RX-to-OTC Switches: Long-Linear Analysis of Pharmacists Decision-Making, S. Madhavan, 111S;
- Effect of Attitudes Toward Rx-to-OTC Switches on Pharmacists' Evaluation of Rx-to-OTC Switch Candidates, S. Madhavan, 103S;
- Not All Over-The-Counter Drugs Are Safe, N.G. Popovich, 166;
- Pharmacists' OTC Consultations: An Evaluation of Message Content and Context, C.W. Barnett, *et al.*, 127S;
- Public Education to Encourage Safe and Effective OTC Use, W.A. Hopkins and Nykamp, 92S;
- Rx-to-OTC Switched Product Prescribing: A Multidimensional Analysis of Physicians' Perceptions, S. Madhavan, 130S;
- Oncology**
- Clinical Oncology/Investigational Drugs Clerkship, L. Hernandez and L.M. Gutierrez, 145S;
- Clinical (The) Pharmacist in Oncologic Drug Development and Cancer Research, B.L. Lum, 85S;
- Educational Needs Assessment of Pharmacists for Cancer Detection: A Pilot Study, B.L. Lum, *et al.*, 78S;
- Pharmacy Instruction in Oncology: Results of a National Survey, R.J. Cersosimo, 107S;
- Residency Training in Oncology Pharmacy Practice, B.C. Riddell, *et al.*, 122S;
- Oral Exams**
- Evaluating Clinical Education in Ambulatory Care: Effectiveness of Oral Exams, J.I. Mackowiak, *et al.*, 76S;
- Orientation**
- Development of a Formalized Orientation Program for Affiliate Clinical Faculty, S.A. Scott, *et al.*, 134S;

## Outpatient Pharmacy

- Evaluation of Multidimensional Work Sampling to Measure Clinical and Clerical Activities in an Outpatient Pharmacy, K.L. Rascati, 91S;

\*\*\*

## PCAT

- Correlations of PCAT Scores, Cumulative Pre-Pharmacy GPA, Age and Sex with Later Academic Performance in a Doctor of Pharmacy Training Program, F.M. Cox and D.W. Teat, 136S;

## Parenteral Therapy Services - Gateway to Clinical Pharmacy Practice, R.A. Giudici, *et al.*, 133S;

## Parsing the Paradigms: The Case for Human Values in the Pharmacy Curriculum, R.G. Mrtek and M.B. Mrtek, 79;

## Patients

- Development of Outcome-Based Assessment Criteria for Student-Generated Pharmacotherapeutic Patient Care Plans, S.A. Scott, 145S;

- Patient Counseling: The Pharmacist's Advice as Perceived by Consumers, B.T. Lively and M.G. Holiday, 127S;

- Questions That Patients Ask Pharmacy Students and Implications for the Curriculum, T. Reutzel, E. Furmaga and D. Dolinsky, 143S;

- Validity and Reliability of an Instrument that Evaluates PharmD Student Performance During a Patient Presentation, D.E. Beck and G.A. Clayton, 120S;

## Pediatrics

- Multidisciplinary Approach in Offering Postdoctoral Fellowship in Pediatric Infectious Disease Therapy, M.C. Nahata, 85S;

- Pediatric Pharmacy Curriculum Survey, R.A. Mangione, *et al.*, 107S;

- Principles of Pediatric Pharmacotherapy, M.C. Nahata, 155;

- Research (A) Program in Pediatric Pharmacy Practice, M.C. Nahata, 95S;

## Perceptions

- Changes in Pharmacy Students' Perceptions of the Pharmaceutical Industry after Visiting a Manufacturer, A.M. Pleil, *et al.*, 112S;

- Consumer Perceptions of Quality and Value of Brand Name and Generic Oral Contraceptive Drug Products, D.P. Zgarrick, *et al.*, 142S;

- Perceived Needs of Recent Graduates for Marketing-Related Knowledge and Skills: Implications for Pharmacy Education, M.T. Rupp and B.A. Szkudlarek, 6;

- Perceptions of Pharmacy Research, Career Choice Satisfaction, and Post-BS: Career Intentions of Pharmacy Students, K. Winans and S. Madhavan, 130S;

- Rx-To-OTC Switched Product Prescribing: A Multi-Dimensional Analysis of Physicians' Perceptions, S. Madhavan, 130S;

- Shifts in Pharmacy Career Perceptions by Pharmacy Students, P.A. Ratto and D.A. Ralph, 102S;

- Undergraduate Pharmacy Students' Perception of the Pharmaceutical Industry, McCollam, *et al.*, 120S;

## Performance

- Academic and Non-Academic Predictors of Pharmacy Student Performance in Basic and Pharmaceutical Science Courses, Clinical Clerkship, and Licensure Examination, B. Kelly, 83S;

- CAI Models for Teaching and Assessing Performance in Professional Experience Programs, R. Jang and W. Fant, 150S;

- Correlations of PCAT Scores, Cumulative Pre-Pharmacy GPA, Age and Sex with Later Academic Performance in a Doctor of Pharmacy Training Program, F.M. Cox and D.W. Teat, 136S;

- Evaluating Effects on Performance, J. Novak, 100S;

- Evaluating Student Performance on Experiential Components of Education, R.R. Couris, 106S;

- Objective-Based (An) Comparison of Student Performance in Clerkship Rotations Modeled by Full-Time Faculty and Volunteer Faculty, C.J. Nithman and L.R. Marshall-Gunn, 147S;

- Poor Student Performance on a Hospital Pharmacy Exam, K. Karnik and R. Rospond, 133S;

- Teaching Performance Based Communication Skills, B. Berger and B.C. Felkey, 93S;

## Personality

- Contribution of Myers-Briggs Personality Preferences to Better Scholarship in Pharmacy, W. Lowenthal and H. Meth, 101S;

- Correlation of First Pharmacy Job Choice with Personality Factors, K.M. Olsen and N.S. Latman, 85S;

- Moral Judgement and Cognitive Personality Characteristics of Beginning PharmD Students, D. Dolinsky, *et al.*, 74S;

- Personality, Communication Beliefs and Apprehension of Pharmacy Students, P.A. Miederhoff and E. Johns, 92S;

- Relationships Between Student Personality, Intended Practice Area and Satisfaction with Pharmacy as a Choice of Career, M.S. Ortiz and A.P. Wolfgang, 92S;

- Self Esteem, Personality, Apprehension and Shyness in Pharmacy Students, Jang, 81S;

## PharmD

- Adaptation of Didactic Drug Literature Evaluation Course for a Flexible PharmD Program, J. Elgert-Madison, *et al.*, 75S;

- Administration of an Objective Structured Clinical Examination (OSCE) to a Stratified Sample of Doctor of Pharmacy Students, K. Hill-Besinque and J. Noguchi, 134S;

- Advantages and Disadvantages of Clinical Service Contracts in a PharmD Entry-Level program, R.J. Anderson, 144S;

- Change: Baccalaureate to PharmD at a Small, Private College of Pharmacy. A Plan for the Future, L.E. Foss and M. Grace, 137S;

- Clerkship Faculty Workloads in Entry Level PharmD Curricula, N.E. Kawahara, *et al.*, 116S;

- Clinical Laboratory Medicine: An Experimental Learning Approach for PharmD Students, L.N. Swanson, *et al.*, 76S;

- Clinical Research Education in Entry-Level Doctor of Pharmacy Program, A. Lau, *et al.*, 131S;

- Comparative Seminar Evaluations by PharmD and Graduate Students, H.L. Smith, *et al.*, 110S;

- Comparison of Career Choices of PharmD vs. BS Graduates of the University of Illinois at Chicago, N. Fjortoft, *et al.*, 131S;

- Computer (A) Model for Estimating Resources Needed to Implement an Entry-Level PharmD Program, E.H. Taylor, *et al.*, 152S;

- Correlations of PCAT Scores, Cumulative Pre-Pharmacy GPA, Age and Sex with Later

- Academic Performance in a Doctor of Pharmacy Training Program, F.M. Cox and D.W. Teat, 136S;

- Cost Analysis of an Entry-Level Doctor of Pharmacy Degree Program, E.H. Taylor, *et al.*, 123S;

- Demand for A Canadian Doctor of Pharmacy Program, J.A. Pugsley, T.R. Einarson and M. Spino, 332, 122S;

- Development and Evaluation of a Pharmacology Course for a Nontraditional PharmD Curriculum, A. Flynn and N. Katz, 139S;

- Development and Validation of a Program Evaluation for External PharmD Degree Students, P.G. Grussing, *et al.*, 103S;

- Development (The) of a Post-Baccalaureate PharmD Required Teaching Rotation, M. Bennett, 144S;

- Development of an Elective Differentiated Curriculum, Z.T. Grapes, *et al.*, 72S;

- Doctor of Pharmacy Rotation in Continuing Education, J.A. Gaska, *et al.*, 124S;

- Entry-Level PharmD Program with a BS in Pharmacy Option, J.H. Fincher, 123S;

- Evaluation of a Model for an Integrated Ambulatory Care Clerkship for Entry Level Doctor of Pharmacy Students, P.A. Simon, *et al.*, 117S;

- Graduates' Evaluation of their PharmD Program, S.M. Vinas and H.L. Mason, 113S;

- How Do Pharmacy Faculty, PharmD and Undergraduate Fifth-Year Pharmacy Students View the "All PharmD" Degree?, N. Charupatanapong, 154S;

- Idaho (The) State University Nontraditional PharmD Program, V.L. Culbertson, 137S;

- Market (A) Analysis for an External PharmD Degree, D.J. Belsheim, 69S;

- Microcomputer Applications Course in Pharmacy Practice for Doctor of Pharmacy Students, R.A. Giudici and B.H. Livengood, 119S;

- Moral Judgement and Cognitive Personality Characteristics of Beginning PharmD Students, D. Dolinsky, *et al.*, 74S;

- Nontraditional PharmD Students: Continuation Curriculum Option Enrollment Profile at UIC, A.A. Flynn, *et al.*, 137S;

- Objective (An) Structured Clinical Examination (OSCE) in a Doctor of Pharmacy Program, K.M. Hill-Besinque and J.K. Noguchi, 119S;

- Peptides, Proteins, Biotechnology: Medicinal Chemistry Foundation and Applications in the UIC Pharmacy (PharmD) Curriculum, B.L. Currie, *et al.*, 124S;

- Pharmaceutical Industry Opportunities Related to Doctor of Pharmacy Training Programs, L.P. Scaros, *et al.*, 119S;

- Professional Attitudes of Beginning PharmD Students, P.G. Grussing, *et al.*, 74S;

- Practicing (The) PharmDs' Attitudes Towards their Education and Career: Six-Year Entry-Level Vs. Two-Year Post-Baccalaureate Degree, A. Fazio, *et al.*, 133S;

- Recruitment (A) Strategy for an All PharmD Program, J.W. Bartling, *et al.*, 82S;

- Role of the Practitioner Advocate in a Nontraditional PharmD Program, A.A. Flynn, 110S;

- Survey (A) of Practice Patterns of the Doctor of Pharmacy, W.S. Pray, 84S;

- Teaching Doctor of Pharmacy Students to Teach: An Elective Teaching/Academic Rotation, K.J. Tietze, *et al.*, 146S;

- Teaching Institutional Review Board (IRB) Participation by Pharmacists in an Entry-Level Doctor of Pharmacy Program, A.

- Lau and T. Hoon, 145S;  
Teaching MEDLINE Searching to Doctor of Pharmacy Students Using Two Different End-User Systems, B.S. Brizuela and J.A. Hesp, 140S;  
Utilization of Doctor of Pharmacy Students for Refill Authorization in Family Practice Residency Training Program, R.G. Hefflinger, 147S;
- Pharmaceutical Care**  
A Clinical Clerkship's Emphasis on Pharmaceutical Care: Focus on Outcome, Rosenberg, *et al.*, 148S;  
Pharmaceutical Education and the Translation of Pharmaceutical Care Into Practice, G.D. Newton, 340;
- Pharmaceutical Education**  
Changing (The) Face of Pharmaceutical Education: Ethics and Professional Prerogatives, R.A. Buerki and L.A. Vottero, 71;  
Pharmaceutical Education and the Translation of Pharmaceutical Care Into Practice, G.D. Newton, 340;  
Pharmaceutical Education in Turkey, M.S. Kislalioglu, *et al.*, 71S;
- Pharmaceutical Industry**  
Academic/Industrial (An) Educational Network Through Fellowship Programs, M.A. Nemecek, *et al.*, 105S;  
Career Pathways Following an Industrial Clinical Pharmacy Practice Post-Doctoral Fellowship, L. Scaros, *et al.*, 134S;  
Changes in Pharmacy Students' perceptions of the Pharmaceutical Industry after Visiting a Manufacturer, A.M. Pleil, *et al.*, 112S;  
Clerkship (A) in Pharmaceutical Advertising, A.L. Spunt and R. McCormick, 134S;  
Comparison of Drug Research and Development Experience Gained in Two Postdoctoral Academic-Industrial Clinical Pharmacy Fellowships, J. Barone, *et al.*, 84S;  
Comparison (A) of the Personality and Work Value Characteristics of Clinical and Industrial Pharmacists, P.A. Miederhoff, 85S;  
Development of an Industrial Pharmacy Career Curriculum Option, Z.T. Grapes and R.A. Jackson, 152S;  
Introducing R & D Concepts to Pharmacy Students, M. Shihabeddin, A. Simonelli, 71S;  
Pharmaceutical (The) Industry and Honors Education: A Winning Combination, J.M. Lausier, 101S;  
Pharmaceutical Industry Opportunities Related to Doctor of Pharmacy Training Programs, L.P. Scaros, *et al.*, 119S;  
Scholarly Activities Associated with a Postdoctoral Industrial Fellowship, D.E. Foster and J. A. Barone, 107S;  
Undergraduate Pharmacy Students' Perception of the Pharmaceutical Industry, A. McCollam, *et al.*, 120S;
- Pharmaceutical Sciences**  
Pharmaceutical Sciences Laboratory, G.S. Chappell, *et al.*, 138S;  
Promoting the Development of Critical Thinking Skills in the Pharmaceutical Sciences, A.R. Garafalo and V. LoPresti, 138S;
- Pharmaceutics Laboratory**  
A Practical and Clinical Approach to Basic Pharmaceutics Laboratory Instruction at Duquesne University, R.A. Giudici, 102S;  
Introduction of an Integrated Microcomputer Spreadsheet Program into an Undergraduate Basic Pharmaceutics Laboratory, R.A. Giudici, 84S;
- Pharmaceutics**  
Demonstration of a Computer-Assisted Acid-Base Tutorial for Medicinal Chemistry and Pharmaceutics, W.J. Murray, *et al.*, 108S;  
Integration of Library Resources into the Pharmaceutics Curriculum, B.S. Reiss, 140S;  
Introducing R & D Concepts to Pharmacy Students, M. Shihabeddin and A. Simonelli, 71S;  
Introduction of an Integrated Microcomputer Spreadsheet Program into an Undergraduate Basic Pharmaceutics Laboratory, R.A. Giudici, 84S;  
Practical (A) and Clinical Approach to Basic Pharmaceutics Laboratory Instruction at Duquesne University, R.A. Giudici, 102S;  
Simple, Rapid Method for Characterization of Kinetics and Degradation Using Multiple Linear Regression, U.V. Banakar, 71S;
- Pharmacist**  
Attitudes of Idaho Pharmacists Toward Current Issues in Pharmacy: Prescribing, Impaired Pharmacists, PharmD Degree, Pharmacy Technician Training, B.A. Adamcik, 91S;  
Attitudes of Pharmacists Toward the Elderly, D.R. Croteau, R.J. Moore and J.L. Blackburn, 113;  
Consultant Pharmacist Certificate Program, C.H. Brown, *et al.*, 139S;  
Consulting Opportunities for Pharmacists, L.L. Naeger, 116S;  
Determinant Attributes in Pharmacists' Drug Product Choice Decisions, E.F. Igboke and J. Thomas III, 112S;  
Exploring and Expanding the Pharmacist's Role in Nicotine Addiction Treatment and Smoking Cessation, C. Stock, *et al.*, 150S;  
How an Adequately Informed Public Chose Between Pharmacists and Non-Pharmacists to Perform 19 Selected Prescription Dispensing Functions, J.R. McCormack, 113S;  
Implementation of a Continuing Education Series to Enhance the Presentation Skills of Pharmacists, J.P. Engle and S.C. Firman, 139S;  
Predicting Pharmacists' Behavior as Lifelong Learners, A.L. Hanson and J.E. De Muth, 139S;  
Pharmacist Impairment: Risks Management and Prevention, K.M. D'Achille, *et al.*, 87S;  
Pharmacist Self-Concept, Predisposition to Communicate, and Desire to Counsel, B.A. Berger, *et al.*, 141S;  
Pharmacists' Attitudes Toward Continuing Education, G.R. Donehew and V.W. Bernardi, 138S;  
Self-Medication by Pharmacists, J. Tiller, *et al.*, 128S;  
Survey of Pharmacists' Involvement in AIDS Education and an Inventory of Educational materials in Maryland Pharmacies, L. Burton, *et al.*, 105S;  
Teaching Institutional Review Board (IRB) Participation by Pharmacists in an Entry-Level Doctor of Pharmacy Program, A. Lau and T. Hoon, 145S;  
Variables Influencing the Labor Force Attachment of Male and Female Pharmacists, P. Lurvey, 131S;  
Why Canadian Pharmacists Participate in Continuing Professional Education, M. Greer, 69S;
- Pharmacoeconomics**  
Graduate Studies in Pharmacoeconomics and Drug Policy, A.S. Stergachis, D.B. Christensen, 155S;
- Pharmacoeconomics**  
Pharmacoeconomics Data Derived from Medication Histories, S.R. Batey, *et al.*, 95S;
- Pharmacokinetics**  
Clinical Pharmacokinetics Research in a Community Hospital, K.D. Campagna, *et al.*, 84S;  
Computer-Aided In Vitro Pharmacokinetic System as a Teaching Model for Undergraduate Pharmaceutics Laboratory Use, H.A. Yun, *et al.*, 110S;  
Computer-Assisted Instruction in Pharmacokinetics: The SIMU Series, T.J. Sullivan, 79S;  
Enrollment of Elderly Patients in Pharmacokinetic Studies, M.B. Burlingame and B. Ameer, 94S;  
Interactive Pharmacokinetic Instruction Using Personal Computers, E.G. Boyce and L.A. Lawson, 95S;  
Meta-Analytic (A) Study of Clinical Pharmacokinetic Service Evaluations, L.D. Ried, *et al.*, 104S;  
Pharmacokinetic Profile of Ibuprofen Enantiomers After Single Dose and at Steady State After Analysis of its Diastereoisomers Reverse Phase HPLC, J.G. Besner, *et al.*, 121S;  
PKS - A Versatile Pharmacokinetic Simulator, N.G. Lordi, T. Shepard, 126S;  
Simple, Rapid Method for Characterization of Kinetics and Degradation Using Multiple Linear Regression, U.V. Banakar, 71S;  
STELLA: Simulation Software for the Pharmacokinetics Classroom, W.L. Hayton, 131;  
Stereoselective Pharmacokinetics of Tocainide in Uremic Patients and in Healthy Human Subjects, K.M. McErlane, *et al.*, 121S;  
Teaching the Importance of Pharmacokinetics in Drug Development, T. Shepard, *et al.*, 102S;  
Using Modified Group System Teaching to Teach Clinical Pharmacokinetics, P.J. Sims, 141S;
- Pharmacology**  
Computer-Simulated Pharmacology Experiment: Use of Probits in Biological Assay, W. Caciari and S. Roberts, 88S;  
Computer Technology Can Enhance Presentation of Pharmacological Principles, W.H. Riffe, 148;  
Controlling Resource Use in a Pharmacology Laboratory Through the Use of Computer Simulation, M.A. Vance and T.L. Hageboeck, 152S;  
Development and Evaluation of a Pharmacology Course for a Nontraditional PharmD Curriculum, A. Flynn and N. Katz, 139S;  
[<sup>3</sup>H]Dopamine Accumulation in Canine Striatal Synaptosome Preparation, P.A. Henry and Y.S. Lau, 108S;  
Effect of L-Carnitine (LC) on Cardiac Function in Diabetic Rats, J.H. McNeil and B. Rodrigues, 122S;  
New (A) Approach to the Pharmacology Laboratory Course: Teaching for Lifetime Learning, D.M. Sylvester and T.P. LaHann, 107S;  
The Use of Telemetry Monitoring System for Teaching Pharmacological Responses of Drugs, M.F. Sylvestri and Y-S Lau, 86S;  
Use of a "Double-Blind" Unknown to Reinforce Autonomic Principles in Pharmacology Laboratory, C.L. Ever, 99S;  
Using Bloom's Taxonomy of the Cognitive Domain to Teach a Required Course in Pharmacology Laboratory Course: Teach-



- ing for Lifetime Learning, M.H. Malone, 108S;
- Pharmacotherapy**  
Development of Outcome-Based Assessment Criteria for Student-Generated Pharmacotherapeutic Patient Care Plans, S.A. Scott, 145S;  
Pharmacotherapeutics for the AIDS Patient, K. Fife, 388;  
Principles of Pediatric Pharmacotherapy, M.C. Nahata, 155;  
Survey of Infectious Disease Pharmacotherapy at U.S. Colleges of Pharmacy, A.W. Hopefl, 145S;  
The Relative Importance of Topics in Infectious Disease Pharmacotherapy: A Survey of Practicing Pharmacists, S.C. Ebert, 119S;
- Pharmacy**  
Pharmacy Research in Academic Institutions, I.L.S. Calligaro, *et al.*, 40;  
Teaching and Learning About Ethical Dilemmas in Pharmacy, W. Lowenthal, 55;
- Pharmacy Administration**  
A Study of Dissertation Titles Related to Pharmacy Administration: Trends and an Exploratory Content Analysis, G. Reardon and S.W. Birdwell, 128S;  
A Survey of Pharmacy Administration Courses in Colleges and Schools of Pharmacy in the United States and Canada, R. McCarthy, *et al.*, 142S;  
Characteristics of Pharmacists Choosing a Nontraditional Graduate Degree in Pharmacy Administration, P.D. Hurd and D.R. Rickert, 90S;  
Development and Implementation of an MBA with a Specialization in Pharmacy Administration, A. Schwartz and S. Holmer, 103S;  
Development of a Course on the Philosophy of the Science of Pharmacy Administration, R.M. Schulz, *et al.*, 112S;  
Development of Student Decision Making Ability via Data Base Management on the IBM-PC, R. Jang, 72S;  
The Relative Stability of Graduate Programs in Pharmacy Administration, A. Schwartz, 75S;
- Pharmacy Education**  
A Review of Externship Experience in Pharmacy Education, N.G. Popovich and L.E. Boh, 181;  
Teaching Human Values in Pharmacy Education: Case Studies from the Classroom and Hospital, S. Poirier, 84;
- Pharmacy Laboratory**  
Using Practitioners in Pharmacy Labs, A.O. Moore, *et al.*, 90S;
- Pharmacy Operation**  
The Feasibility of Operating a Pharmacy by a College of Pharmacy, G. Donehew, *et al.*, 93S;
- Pharmacy Practice**  
AIDS Research and Pharmacy Practice Education, R.G. Deeter and J.A. Barone, 95S;  
Ethical Problems in Pharmacy Practice: A Survey of Difficulty and Incidence, A.M. Haddad, 1;  
Evaluation of Student Knowledge Base and Improvement for a Pharmacy Practice Dispensing Laboratory Course, L.L. Marshall and T. Miller, 135S;  
Incorporation of Simulated Hospital and Community Practice Environments in a Pharmacy Practice Laboratory, J. Triplett and C. Aceves-Blumenthal, 118S;  
Interpersonal Conflict in Corporate Pharmacy Practice, R. Jang, *et al.*, 91S;  
Microcomputer Applications Course in Pharmacy Practice for Doctor of Pharmacy Students, R.A. Giudici and B.H. Livengood, 119S;  
Pharmacy Practice Research at the University of Georgia College of Pharmacy, J.W. Cooper, 96S;  
Relationship of Behavioral Science to Pharmacy Practice, C.D. Hepler and P.A. Miederhoff, 74S;
- Pharmacy Services**  
Promoting Clinically-Oriented Pharmacy Services Through Collaboration Between a College of Pharmacy and a Hospital Group Purchasing Program, K.A. Swanson, *et al.*, 148S;
- Pharmacy Students**  
Longitudinal (A) Study of Attitude Change in Pharmacy Students During School and Post Graduation, M.C. Smith, J.E. Fincham and S. Messer, 30;  
Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, S.J. Coons and J.R. Draugalis, 126;  
Training Relevance of Pharmacy Students, H.M. Anderson-Harper, *et al.*, 94S;
- Physical Assessment**  
PharmD Physical Assessment Workshop Taught by Nursing Faculty: Student Perception of Utility, R.A. Carter and D. Kauffman, 96S;
- Physical Pharmacy**  
A Further Evaluation of Supplemental Instruction in a Physical Pharmacy Course, B. Kelly and B. Sandmann, 71S;  
The Design and Evaluation of a Graduate Course in Physical Pharmacy, M.S. Kislalioglu, *et al.*, 125S;
- Physicians**  
Competing for Prescription Dollars: The Public's Views of Physician Dispensing, L.A. Pink and T.L. Hageboeck, 126S;  
Development of a Rational Drug Therapy Course for Physicians, D.P. Elliott, *et al.*, 100S;  
Rx-To-OTC Switched Product Prescribing: A Multi-Dimensional Analysis of Physicians' Perceptions, S. Madhavan, 130S;
- Plant Biotechnology: A Promising Field for Drugs in the Future**, A.T. Awad, 86S;
- Policy**  
Chair Report for the Bylaws and Policy Development Committee, R.S. Beardsley, 16S;  
Graduate Studies in Pharmacoeconomics and Drug Policy, A.S. Stergachis, D.B. Christensen, 155S;  
The Need for University Implemented Policies Regarding Drug Impaired Pharmacy Students, S.L. Szeinback, *et al.*, 124S;
- Postgraduate**  
Practitioner Interest in Postgraduate Study in Pharmacy Administration, T.L. Hageboeck and A.P. Wolfgang, 74S;  
Postgraduate Education: A Survey of Georgia Pharmacists, K. Cunney, *et al.*, 114S;  
Postgraduate Plans of Thai Pharmacy Students, N. Charupatanapong, 114S;
- Practice**  
Development and Implementation of Practice-Oriented Laboratory Activities, S.M. Pawlak, 117S;  
Perceived Barriers to an Increased Clinical Role by Iowa Pharmacy Practitioners, G.J. Vogel and P.J. Levine, 149S;
- Pharmacists' Views on Congruence Between Practice and Education**, H.A. Smith, *et al.*, 114S;
- Practitioner's Assessment of the Externship Experience: A Retrospective Analysis**, C. Aceves-Blumenthal and J.E. Stewart, 77S;
- Survey (A) of Practice Patterns of the Doctor of Pharmacy**, W.S. Pray, 55, 84S;
- Teaching Practices and Attitudes of 500 Volunteer Preceptors: A Survey**, J.K. Noguchi, *et al.*, 136S;
- Using Practitioners in Pharmacy Labs**, A.O. Moore, *et al.*, 90S;
- Practice Patterns**  
A Survey of Practice Patterns of the Doctor of Pharmacy, W.S. Pray, 84S;  
A Comparison of Student Attitudes Toward Pharmacy Practice in BS and PharmD (Entry-Level) Programs, C.W. Barnett, *et al.*, 102S;  
Development and Implementation of Practice-Oriented Laboratory Activities, S.M. Pawlak, 117S;  
Perceived Barriers to an Increased Clinical Role by Iowa Pharmacy Practitioners, G.J. Vogel and P.J. Levine, 149S;
- Pharmacists' Views on Congruence Between Practice and Education**, H.A. Smith, *et al.*, 114S;
- Teaching Practices and Attitudes of 500 Volunteer Preceptors: A Survey**, J. Noguchi, *et al.*, 136S;
- Practice Site**  
Importance of Collaborative Efforts Between Pharmacy Practice Sites and Colleges to Develop Postgraduate Residency Program, D.E. Letendre, 138S;
- Practitioner**  
Practitioner's Assessment of the Externship Experience: A Retrospective Analysis, C. Aceves-Blumenthal and J.E. Stewart, 77S;  
Practitioner Interest in Postgraduate Study in Pharmacy Administration, T.L. Hageboeck and A.P. Wolfgang, 74S;  
Using Practitioners in Pharmacy Labs, A.O. Moore, *et al.*, 90S;
- Pre-rotation Examination**  
Development of a Comprehensive Exam for Pharmacy Students Prior to Clinical Externship Training, M.J. Rybak and S. Pancorbo, 84S;
- Preceptors**  
A Preceptor-Extern Comparison Using Hall's Professionalism Scale, P.A. Robers and W.A. Kloesel, 104S;  
Evaluation Practices of Volunteer Preceptors: A Survey, J.K. Noguchi and K.M. Hill-Besinque, 147S;  
Improving Communication Between a College of Pharmacy's Professional Experience Program and the Pharmacy Preceptor, D.M. Marchand, 83S;  
Preceptor Perceptions of the Communication Skills of Non-Native First-Year Pharmacy Students, K.A. Johnson and B.D. Seal, 77S;  
Perspectives on the Clerkship Experience: A Comparison of Students and Volunteer Preceptors, K.M. Hill-Besinque and J.K. Noguchi, 147S;  
Survey of Experiential Programs: Course Competencies, Student Performance and Preceptor/Site Characteristics, L.E. Boh, M.E. Pitterle, F. Schneider and C.L. Collins, 105;  
Student Perceptions of Clinical Pharmacy Services Provided by Community Pharmacy



- Preceptors, D.K. Fowlkes and J.R. McCormack, 83S;
- Teaching Practices and Attitudes of 500 Volunteer Preceptors: A Survey, J. Noguchi, *et al.*, 136S;
- The Relationship Between the Timing of Preceptor Evaluation of the Student and the Student Evaluation of the Clinical Clerkship Preceptor: A Pilot Study, Karen J. Tietze, *et al.*, 78S;
- Preprofessional**  
Introducing Preprofessional Students to Drug Literature, J.M. Anderson, 140S;
- Prerogatives**  
Changing (The) Face of Pharmaceutical Education: Ethics and Professional Prerogatives, R.A. Buerki and L.A. Vottero, 71;
- Ethos Habits and Prerogatives of Professionalism, D. Rennie, 66;
- Professional Prerogatives: Perspectives of an Ethicist, R.L. Veatch, 74;
- Presentations**  
A Graduate Seminar Course Focused on Presentation Skills, T.A. Shepard, 110S;
- Implementation of a Continuing Education Series to Enhance the Presentation Skills of Pharmacists, J.P. Engle and S.C. Firman, 139S;
- Values of Mandatory Topic Presentation as Perceived by Pharmacy Students, J.M. Durgin, 120S;
- President's Section**  
Cultivating Intellectual Confidence in Our Students, N.G. Popovich, 402;
- Educational (The) Care of *Der Junge Nachwuchs*, N.G. Popovich, 279;
- The Role of the College/School of Pharmacy, J.A. Biles, 195;
- Who Is Winning? Who Is Losing? J.A. Biles, 88;
- Prevention of Osteoporosis in Premenopausal and Postmenopausal Women, R. Sagraves, 158;
- Principles of Pediatric Pharmacotherapy, M.C. Nahata, 155;
- Problem-Based**  
Initial Evaluation of a Problem-Based Format for Nonprescription Therapeutics Instruction, W.J. Falbe, *et al.*, 132S;
- Problem Solving**  
Descriptive (A) Evaluation of Medication Problem Solving Skills of Institutional Pharmacists via Microcomputer Patient Simulations, G.E. MacKinnon, *et al.*, 56S;
- Evaluating Problem Solving in Postgraduate Clinical Pharmacy Clerkships, D.J. Belsheim, 94S;
- Initial Evaluation of a Problem-Solving Format for Therapeutics Instruction: A Continuum from Nonprescription Therapeutics, R.W. Sommi and Patricia A. Marken, 148S;
- Integration of Problem-Solving Into a Clinical Pharmacy and Therapeutics Course Through the Pharmacists' Work-up of Drug-Related Problems, R.A. Hamilton, *et al.*, 153S;
- Problem-Solving (A) Approach to Pharmacy Student Instruction, H.F. Kabat, 55S;
- Product Managers**  
Pharmaceutical Product Managers in a Marketing Case Studies Course, N.D. Crane and R. Jang, 82S;
- Professional Affairs**  
Chair Report for the Professional Affairs Committee, J.E. Engle, 20S;
- Professional Experience**  
Initial Experience with the Analysis of Student Activities in the Professional Experience Program, R.A. Hamilton and B.G. Bryant, 106S;
- Professionalism**  
A Follow-Up of Recent Pharmacy Graduates with Hall's Professionalism Scale, P.A. Robers, 113S;
- A Preceptor-Extern Comparison Using Hall's Professionalism Scale, P.A. Robers and W.A. Kloesel, 104S;
- Issues Facing Women in Pharmacy: Preparing Women for the Profession, B.L. Sauer and M.A. Koda-Kimble, 107S;
- Zero-Credit Hour Course in Professionalism and Career Development, M.W.L. Lee and J.C. Russell, 101S;
- Program**  
Bachelor (A) of Science Toxicology Program: Description, Resources, Student Profiles and Graduate Placement, P.W. Ferguson, W.M. Bourn, C.N. Pope and Roberts, 243;
- Comparison and Evaluation of Three Microcomputer Drug Interaction Programs, T.I. Poirier and R.A. Giudici, 116S;
- Continuing (A) Education Program Designed to Make a Difference, C.E. Cox, and A.I. Ponting, 100S;
- Descriptive (A) Analysis of Pharmacy Continuing Education Programs Offered by ACPE-Approved Providers in 1989, M.C. Shannon and K. Schnobrich, 317;
- A Descriptive (A) Analysis of Program Selection by Pharmacists to Meet Mandatory Continuing Education Requirements in Michigan, W.D. Hardigan, 55, 109S;
- Development and Implementation of an Introductory Clinical Program Designed for a Non-Medical Center Locale, E. French, *et al.*, 84S;
- Development of a Formalized Orientation Program for Affiliate Clinical Faculty, S.A. Scott, *et al.*, 134S;
- Evaluation of an Undergraduate Computer-Assisted Instruction Program on Congestive Heart Failure, S.A. Myre and W.K. Fant, 88S;
- National (A) Pharmacy Program of Community Substance Abuse Education, A.C. Tommasello, 152S;
- Programmed Text**  
A Programmed Text in Pharmaceutical Biotechnology, S.W. Zito, *et al.*, 150S;
- Public**  
How an Adequately Informed Public Chose Between Pharmacists and Non-Pharmacists to Perform 19 Selected Prescription Dispensing Functions, J.R. McCormack, 113S;
- Public Education to Encourage Safe and Effective OTC Use, W.A. Hopkins and D. Nykamp, 92S;
- Purchasing**  
A Teaching Model on Purchasing and Inventory Control, M.R. Lahoz and R.O. Nickel, 131S;
- Decision Analysis Model for Hospital Pharmacy Purchasing Group Participation, G.E. Bass, *et al.*, 103S;
- Promoting Clinically-Oriented Pharmacy Services Through Collaboration Between a College of Pharmacy and a Hospital Group Purchasing Program, K.A. Swanson, *et al.*, 148S;
- \*\*\*
- Quality Assurance**  
A Structured Review of Pharmacy Quality Assurance Literature, A.L. Ilersich, *et al.*, 123S;
- \*\*\*
- Readership**  
Pharmacist and Student Readership of State Pharmacy Association Publications, Pilkington, *et al.*, 130S;
- Recruitment**  
A Prepharmacy Student Organization, A Proactive Recruitment Strategy, A. Keating and M. Lee, 141S;
- A Recruitment Strategy for an All PharmD Program, J.W. Bartling, *et al.*, 82S;
- An Alternative to Demographic Segmentation in the Search for Potential Graduate Students: Psychographic Segmentation, M. Perri, *et al.*, 142S;
- Assessing the Attributes which Influence Pharmacy School Selection to Promote Effective Recruiting Strategies, V.F. Roche, L.L. Peters and A.A. Nelson Jr., 322, 129S;
- Assessing the Attributes which Influence Pharmacy School Selection Utilizing Freshman Pharmacy Student Survey, V.F. Roche, *et al.*, 90S;
- Effects of a Pharmacy Student Recruitment Program, C.A. Bond, M.E. Swandby, P.A. Palmer and M.E. Pitterle, 258;
- Factors Determining Pharmacy Students' Intentions of Pursuing Graduate Education, J.R. Draugalis, *et al.*, 104S;
- Increasing Minority Student Contact with Colleges of Pharmacy, S.G. Hoag, 149S;
- Reasons and Resources Which Were Influential in the Decision to Attend Pharmacy School, Part II: Impact on Recruitment Policy, W.B. French and Thiessen, 92S;
- Using Videotape as a Recruiting Tool for Pharmacy Organizations, A.Z. Angle and J. Blank, 107S;
- Relicensure**  
Impact of Relicensure Prerequisites on Pharmacist Preferences and Utilization of Continuing Education, B.L. Jones, *et al.*, 87S;
- Renal Excretion of Sodium in Dopamine Deficiency**, S. Cox and A.L. Jadhav, 151S;
- Reports**  
Annual Report of the American Council on Pharmaceutical Education to the Profession and the Public, D.A. Nona, 187;
- Chair Reports  
Academic Affairs Committee, M.C. Gerald, 12S;
- Academic Sections Coordinating Committee, T.L. Lemke 31S;
- Bylaws and Policy Development Committee, R.S. Beardsley, 16S;
- Finance Committee, N.G. Popovich, 19S;
- Professional Affairs Committee, J.E. Engle, 20S;
- Research and Graduate Affairs Committee, J.E. Cassidy, 25S;
- Council of Faculties, R.L. Day, 30S;
- Council of Faculties, G.A. Cochran, 30S;
- Report of the Journal Editor, G.H. Cocolas, 28S;
- Report of the Independent Auditor, R.B. Coughlan, 32S;
- The Choice is Influence: The 1991 Argus Commission Report, W.A. Miller, W.H. Campbell, J.R. Cole, R.D. Gibson, H.R. Manasse Jr. and M. Ray, 8S;
- Research**  
A Direction for Enriching Undergraduate

- Education through Participation in Clinical Pharmacy Research, M.C. Nahata, 117S;  
 An Evaluation of the Competency of New Pharmacy Graduates to Assess Pharmaceutical Economic Research, J.P. Juergens, *et al.*, 144S;  
 An Example of Research Collaboration Between Three Colleges of Pharmacy, Rascati, 129S;  
 Ethical Behavior and Misconduct in Scientific Research: A Topic Needing Attention in Graduate Curricula, W.M. Davis, 108S;  
 Experimental Design in Clinical Research: A Graduate Course Using a Student Centered-Problem Based Approach, R.M. Lush, *et al.*, 132S;  
 Health Services Research: Its Scope and Significance, D.M. Steinwachs, 274;  
 Inculcating Research Values in Undergraduate Pharmacy Students, K. Winans and Madhavan, 118S;  
 Institutional Factors: Do They Influence Undergraduate Pharmacy Students' Research Attitudes and Intentions?, K. Winans and S. Madhavan, 142S;  
 Pharmacy Practice Research at the University of Georgia College of Pharmacy, J.W. Cooper, 96S;  
 Pharmacy Research in Academic Institutions, I. L. S. Calligaro, R.A. Hutchinson, D. Hermann, T. D. Rucker and R.L. Batenhorst, 40;  
 Strategic Planning Factors in Clinical Pharmacy Research Program Development, R.H. Reuning, 119S;  
 The Center for the Technological Development of Natural Products, J.D. McChesney, 153S;  
 The Development of an Undergraduate Laboratory Course and Research Rotation, W.T. Harris, *et al.*, 99S;  
 Undergraduate Research at the University of Arkansas College of Pharmacy, Lattin, *et al.*, 100S;  
 Utilization of a College-wide Science Forum to Promote Research Awareness, L.J. Goltzman, *et al.*, 152S;  
**Research and Development**  
 Introducing R & D Concepts to Pharmacy Students, M. Shihabeddin, A. Simonelli, 71S;  
**Research Participation Program**  
 Diurnal Variation in the Effects of Methylxanthines on Rat Brain Levels of Endogenous Opioids, C. Hall and M.R.I. Soliman, 151S;  
 Renal Excretion of Sodium in Dopamine Deficiency, S. Cox and A.L. Jadhav, 151S;  
 Synthesis of Novel Bicyclic 1-Benzylotetrahydroisoquinoline Molecules as Platelet Aggregation Inhibitors, G.F. Baker, Jr. and V.F. Roche, 151S;  
**Residency**  
 Community Pharmacy Residency Program, R.L. McCarthy and L.M. Everest, 138S;  
 Development of a Geriatric Pharmacy Mini-Residency Program, G.M. McCart, *et al.*, 109S;  
 Development of Long-Term Care Pharmacy Skills Through a One-Year Postbaccalaureate Residency Program, L.A. Finn, *et al.*, 76S;  
 Importance of Collaborative Efforts Between Pharmacy Practice Sites and Colleges to Develop Postgraduate Residency Program, D.E. Letendre, 138S;  
 Initiating a Residency in Community Pharmacy, G.E. Downs, *et al.*, 76S;  
 Residency Training in Oncology Pharmacy Practice, B.C. Riddell, *et al.*, 122S;  
 Utilization of Doctor of Pharmacy Students for Refill Authorization in Family Practice Residency Training Program, R.G. Hefflinger, 147S;  
**Retail Pharmacy**  
 Innovating Corporate Retail Pharmacy Management Externships: The Tennessee Experience, E.H. Clouse, *et al.*, 73S;  
 Microcomputers Retail Pharmacy Management Support: An Integrated Heuristic Model, G.E. Bass, 74S;  
 Review (A) of Externship Experience in Pharmacy Education, N.G. Popovich and Boh, 181;  
 Role (The) of the College/School of Pharmacy, J.A. Biles, 19S;  
 Roster of the Voting Delegates in Attendance at the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, AACP Staff, 67S;  
**Rotation**  
 A Process to Validate Life Experiences for Credit Toward Clerkship Rotations, C. Aceves-Blumenthal, 151;  
 An Objective-Based Comparison of Student Performance in Clerkship Rotations Modeled by Full-Time Faculty and Volunteer Faculty, C.J. Nithman and L.R. Marshall-Gunn, 147S;  
 Development (The) of a Post-Baccalaureate PharmD Required Teaching Rotation, M. Bennett, 144S;  
 Development (The) of an Undergraduate Laboratory Course and Research Rotation, Harris, *et al.*, 99S;  
 Doctor of Pharmacy Rotation in Continuing Education, J.A. Gaska, *et al.*, 124S;  
 Nontraditional Externship Rotations - Description and Evaluation, L. Selander and K. Russi, 148S;  
 Opportunities Presented by a Clinical Rotation in the Emergency Department, S. Lafin, *et al.*, 133S;  
 Students' Attitudes Toward and Knowledge of Aging and Geriatric Nursing Home Patients Before and After a Clinical Rotation, S.W. Miller, R.K. Miyahara, 147S;  
 Students' Attitudes Toward the Mentally Ill Before and After Clinical Rotations, D.M. Jermain and M.L. Crismon, 45, 133S;  
 Teaching Doctor of Pharmacy Students to Teach: An Elective Teaching/Academic Rotation, K.J. Tietze, *et al.*, 146S;  
 RxPERT, A Drug Product Interchangeability Expert System, M.L. Greer, 130S;  
 \*\*\*  
**Searches**  
 Alternative Literature Searching Methods, W.K. Fant, *et al.*, 70S;  
 Evaluation of End-User Computer Searches, M. Abate, *et al.*, 110S;  
 Medical Information Quick: A User Friendly Database to Teach Online Searching, R.J. Cluxton Jr., *et al.*, 88S;  
**Self-Care**  
 Certificate Program in Self-Care: Testing a Model, L.G. Suveges, *et al.*, 87S;  
 Development and Evaluation of Computer-Assisted Guided Design for Problem Solving in Self-Care Pharmacy Practice, G.D. Newton, N.G. Popovich and J.D. Lehman, 301;  
 Development of a Certificate Program in Self Care for Pharmacy Practice, L.G. Suveges, *et al.*, 95S, 101S;  
 Development of Instruments to Evaluate the Florida Self-Care Consultant Law, B.A. Bulfer, 103S;  
 Incorporating Written and Verbal Communication Exercises Into a Self-Care Pharmacy Practice Course, S.M. Pawlak, 106S;  
 Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, S.J. Coons and J.R. Draugalis, 126;  
 Self-Care Information and Its Effects on Measures of Health Attitudes and Beliefs, S.J. Coons, *et al.*, 93S;  
**Self-Assessment**  
 Educational and Professional Self-Assessment: A Profile of Alumni and Student Responses, D.L. Howrie, *et al.*, 147S;  
**Self-Medication**  
 Experiential Learning and Professional Socialization Through Large Group Interaction in Two Self-Medication Courses, H. Radchuk, *et al.*, 135S;  
 Self-Medication by Pharmacists, J. Tiller, *et al.*, 128S;  
 Self-Medication Practices in a Developing Country-A Preliminary Study in Thailand, N. Charupatanapong and K. Rascati, 130S;  
 Self-Study Modules for Training Pharmacy Educators and Practitioners in Geriatrics, W.J. Falbe, *et al.*, 101S;  
**Seminar**  
 Comparative Seminar Evaluations by PharmD and Graduate Students, H.L. Smith, *et al.*, 110S;  
 Development of an Introduction to Pharmacy Seminar Series for Non-Pharmacist Faculty, M. Chitty, *et al.*, 152S;  
 Honors Seminar as a Mechanism to Stimulate Undergraduate Research, A. McKay, 127S;  
**Services**  
 Cost (The) Effectiveness of Combining Computer-Library-Media Services in a School of Pharmacy, E.C. Jackson, *et al.*, 123S;  
 Impact (The) of Value Added Services on Patient Drug Compliance, W. Siganga, *et al.*, 127S;  
 Marketing Pharmacy Services via the Individual Pharmacist, N. Ahmad and R. Jang, 73S;  
 Pharmaceutical Services in the Nation's Teaching Hospitals, C.A. Bond, *et al.*, 144S;  
 Services Offered by Arkansas Community Pharmacies and Actions Likely to be Taken if the Estimated Acquisition Cost (EAC) Proposed by the Health Care Financing Administration (HCFA) is Implemented, J.R. McCormack, 128S;  
 Student Perceptions of Clinical Pharmacy Services Provided by Community Pharmacy Preceptors, D.K. Fowlkes and J.R. McCormack, 83S;  
**Shadow Program**  
 Pharmacy Career Choices-Shadow Programs, E.S. Becker, 127S  
**Simulation**  
 Comparison (A) of Computer Simulation and Traditional Methods for Teaching Financial Management to Pharmacists, K.A. Lawson, *et al.*, 109S;  
 Computer Simulated Model to Quantify the Loading Costs of Pharmaceuticals, Z.T. Grapes, 82S;  
 Computer Simulated Pharmacology Experi-

- ment: Use of Probits in Biological Assay, W. Cacini and S. Roberts, 88S;
- Computer-Delivered Patient Case Simulations in Clinical Pharmacy Education, L.E. Davis and E.F. Safir, 146S;
- Controlling Resource Use in a Pharmacology Laboratory Through the Use of Computer Simulation, M.A. Vance and T.L. Hageboeck, 152S;
- Conversion of the Communi-Pharm Computer Simulation Program to an Apple II Format, D.A. Ralph, *et al.*, 72S;
- Development of a Community Pharmacy Practice Patient Simulation Program on a Microcomputer, M. Pitterle, L. Boh, 76S;
- Development of an Integrated Audio Cassette and Computer Based Patient Simulation, J.E. De Muth, *et al.*, 109S;
- Enhancing Instructional Efficiency in an External Doctor of Pharmacy Degree Program via Simulations, J.W. Blank, *et al.*, 69S;
- Formulating Capital Investment Decisions with Monte Carlo Simulation, D.A. Sclar, 152;
- Implementation of a Medication Simulation in a Pre-experiential Course, L.E. Boh and M.E. Pitterle, 146S;
- Incorporation of Simulated Hospital and Community Practice Environments in a Pharmacy Practice Laboratory, J. Triplett and C. Aceves-Blumenthal, 118S;
- PKS - A Versatile Pharmacokinetic Simulator, N.G. Lordi, T. Shepard, 126S;
- Simulation (A) Experiment for Diffusion Based Drug Transport, J.W. Mauger, 80S;
- STELLA: Simulation Software for the Pharmacokinetics Classroom, W.L. Hayton, 131;
- Teaching Pharmacy Students About Monoclonal Antibodies and their Use in Targeted Drug Delivery Systems through a Simulated Laboratory Procedure, Roe, 89S;
- Using a Computer-Simulation Program and a Traditional Approach to Teach Pharmacy Financial Management, K.A. Lawson, M.D. Shepherd and V.R. Gardner, 226;
- Simulator**
- Innovations in Pharmacy Education: Pharmacy Career Simulator, M. Perri and Duke, 88S;
- Skills**
- Assessing Pharmacists' Needs for Marketing-Related Knowledge and Skills, Rupp and B.A. Szkudlarek, 126S;
- Perceived Needs of Recent Graduates for Marketing-Related Knowledge and Skills: Implications for Pharmacy Education, M.T. Rupp and B.A. Szkudlarek, 6;
- Student Expectations for, and Importance of Selected Skills Experiences during the Pharmacy Externship Program, A.P. Wolfgang and T.L. Hageboeck, 74S;
- Smoking**
- Exploring and Expanding the Pharmacist's Role in Nicotine Addiction Treatment and Smoking Cessation, C. Stock, *et al.*, 150S;
- Social Pharmacy**
- Effects of a Group Research Project in Social and Behavioral Pharmacy, J.K. Mount, 82S;
- Social Policy**
- Teaching an Interdisciplinary Pharmacy Course in Drug Abuse and Social Policy, D.E. Joranson and P.L. Ranelli, 74S;
- Social Science**
- Integrating Critical Thinking into a Social Science Course Through Library Resources and Non-Directive Research, K.J. Blume, 140S;
- Special Publications**
- New Journals and Special Publications, 208, 297;
- Spreadsheet**
- Development of Spreadsheet Analytical Techniques in a Pharmacy Management Course, W.T. Sharp, 103S;
- Introduction of an Integrated Microcomputer Spreadsheet Program into an Undergraduate Basic Pharmaceutics Laboratory, R.A. Giudici, 84S;
- Spreadsheet (A) Adaptation of a Market Based Pricing Model, D.B. Christensen, and W.E. Fassett, 91S;
- Stability of Aspartame in Buffered Aqueous Systems**, S. Sanyude, *et al.*, 121S;
- Statistics**
- Roster of the Voting Delegates in Attendance at the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, AACP Staff, 67S;
- The Pharmacy Student Population: Applications Received 1989-90, Degrees Conferred 1989-90, Fall 1990 Enrollments, S.P. Meyer and M.S. Sherman, 57S;
- Sterile (A) Product Technology Course for Hospital and Home Health Care Practitioners**, K.S. Alexander, 102S;
- Stock Returns**
- Using an Event Study Methodology to Study the Expected Effects of the DPC-PTA Act of 1984 on Stock Returns of Pharmaceutical Manufacturers, K.A. Proctor, *et al.*, 115S;
- Strategic Planning in Higher Education: A Framework for Pharmacy Education**, Draugalis and M.K. Slack, 55S;
- Stress**
- An Analysis of Potential Causes of Burnout and Stress Among Pharmacy School Faculty, C.W. Barnett, *et al.*, 126S;
- Career Commitment, Career Plans, and Perceived Stress: A Survey of Pharmacy Students, B.G. Ortmeier, A.P. Wolfgang and B.C. Martin, 138;
- Stress Factors in the Retail Pharmacy Setting, D.A. Ralph and W.B. French, 104S;
- Stress Perception and Career Commitment: A Survey of Pharmacy Students, B.G. Ortmeier, *et al.*, 128S;
- Work Stress in Chain Pharmacists, R. Jang, *et al.*, 94S;
- Students**
- A Study of the Career, Marital and Lifestyle Aspirations of Pharmacy Students, K.A. Speranza Sr. and C.L. Vieweg, 115S;
- Academic and Non-Academic Predictors of Pharmacy Student Performance in Basic and Pharmaceutical Science Courses, Clinical Clerkship, and Licensure Examination, B. Kelly, 83S;
- Academic Dishonesty Among Pharmacy Students: Attitudes and Behaviors, G.P. Stoehr and L.K. Wong, 146S;
- AIDS and the Pharmacy Student: A Need for Education, I. Kaplan, *et al.*, 115S;
- An Assessment of Pharmacy Students' Health-Related Attitudes and Beliefs, S.J. Coons and J.R. Draugalis, 111S;
- An Assessment of Pharmacy Students' Learning Strategies, B. Adamcik, *et al.*, 111S;
- Career Choice, Plans and Commitment of Pharmacy Students, K.L. Rascati, 111S;
- Cultivating Intellectual Confidence in Our Students, N.G. Popovich, 402;
- Evaluation of Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students, C. Aceves-Blumenthal and E. Clouse, 118S;
- Factors Influencing the Selection of a Professional Degree in Undergraduate Pharmacy Students: A Two-Year Analysis, C. Aceves-Blumenthal, 135S;
- Longitudinal Study of Attitude Change in Pharmacy Students During School and Post Graduation, M. Smith, *et al.*, 113S;
- Need (The) for Change in Pharmaceutical Education: A Student's Perspective, C.J. Godfrey, 376;
- Need (The) for University Implemented Policies Regarding Drug Impaired Pharmacy Students, S.L. Szeinback, *et al.*, 124S;
- Nutrition and Diet Therapy for Pharmacy Students, W.J. Murray and P.W. Jungnickel, 119S;
- Nutritional Assessment and Physical Fitness in Pharmacy Students, W.J. Murray, *et al.*, 133S;
- Perceptions of Pharmacy Research, Career Choice Satisfaction, and Post-BS Career Intentions of Pharmacy Students, K. Winans and S. Madhavan, 130S;
- Pharmacy Students' Attitudes and Beliefs Regarding Self-Care and Personal Responsibility for Health, S.J. Coons and J.R. Draugalis, 126;
- Relationship (The) Between Student Achievement Motivation and Student's Views on the Purpose of Schooling, N.E. Kawahara, 136S;
- Self Esteem, Personality, Apprehension and Shyness in Pharmacy Students, R. Jang, 81S;
- Stress Perception and Career Commitment: A Survey of Pharmacy Students, B.G. Ortmeier, *et al.*, 128S;
- Student Attitudes About Computers in Pharmacy, H.M. Anderson-Harper, *et al.*, 93S;
- Students' Attitudes Toward the Mentally Ill Before and After Clinical Rotations D.M. Jernain and M. L. Crismon, 45;
- Symptoms Associated with Drinking and other Drug Use and Use of Helping Resources by Pharmacy Students, C. Stock, 134S;
- Values of Mandatory Topic Presentation as Perceived by Pharmacy Students, J.M. Durgin, 120S;
- Study Method**
- Development of a Pharmacy-Based How To Learn How to Study Program, Z.T. Grapes and D. Whordley, 72S;
- Pharmaceutical Calculations: A Study Guide Approach, R. Knoll and K. Nelson, 111S;
- Suggested Curricular Guidelines for Pharmacy Education Concerning Alcohol and Other Drug Abuse and Addictive Disease**, J.N. Baldwin, *et al.*, 311;
- STELLA: Simulation Software for the Pharmacokinetics Classroom**, W.L. Hayton, 131;
- Support of Clinical Pharmacy Activities by Pharmacists, Nurses and Physicians**, B.A. Adamcik, *et al.*, 81S;
- Substance Abuse**
- National (A) Pharmacy Program of Community Substance Abuse Education, A.C. Tommasello, 152S;
- Survey**
- Baccalaureate Experiential Curriculum Requirement: Results of an AACP Survey, G.S. Wellman, *et al.*, 83S;



- Comprehensive (A) Survey of Media Departments Servicing U.S. Schools of Pharmacy, D.K. Johnson, *et al.*, 140S;
- Consumer Satisfaction with Source of Prescription Medications: A Telephone Survey, H.A. Smith and S.J. Coons, 126S;
- Ethical Problems in Pharmacy Practice: A Survey of Difficulty and Incidence, A.M. Haddad, 1;
- Evaluation Practices of Volunteer Preceptors: A Survey, J.K. Noguchi and K.M. Hill-Besinque, 147S;
- Externship Expectations Survey, J. McCombs, *et al.*, 132S;
- National (A) Pharmacy Survey of the Availability of Hardware Required for Continuing Education Delivery Systems J.E. De Muth, 36;
- Nebraska Pharmacist Manpower Survey, D.M. Scott, *et al.*, 130S;
- Postgraduate Education: A Survey of Georgia Pharmacists, K. Cuny, *et al.*, 114S;
- Premarketing (A) Survey of Interest in CE Credit Programs for Computers, D.A. Riley, 138S;
- Relative (The) Importance of Topics in Infectious Disease Pharmacotherapy: A Survey of Practicing Pharmacists, S.C. Ebert, 119S;
- Status (the) of Home Intravenous Therapy Instruction Provided by U.S. Schools and Colleges of Pharmacy, M.R. Monk, T.R. Brown, D.D. Garner and M.C. Smith, 120;
- Survey of Evaluative Methods Used in PharmD Adult Medicine Clerkships, G.D. Clifton, *et al.*, 96S;
- Survey of Experiential Programs: Course Competencies, Student Performance and Preceptor/Site Characteristics, L.E. Boh, M.E. Pitterle, F. Schneider and C.L. Collins, 105;
- Survey of Infectious Disease Pharmacotherapy at U.S. Colleges of Pharmacy, A.W. Hopefl, 145S;
- Survey (A) of Pharmacy Administration Courses in Colleges and Schools of Pharmacy in the United States and Canada, R. McCarthy, *et al.*, 142S;
- Survey of Saskatchewan Pharmacists' Opinions About Continuing Pharmacy Education, L. Suveges, *et al.*, 139S;
- The Waxman-Hatch Act in Undergraduate Pharmacy Education: A National Survey, S. Kucukarslan and A. Gumbhir, 143S;
- Symposium**
- An Educational Symposium Designed for Adjunct Faculty Development, E. Hassan and R.A. Kerr, 117S;
- \*\*\*
- Teacher's Seminar**
- It's Not *What* You Know, But *How* You Know, J.A. Bell, 383;
- What Makes Science Hard, S. Tobias, 378;
- Teachers Topics**
- Antiparkinsonian Drug Therapy, J.D. Adams, 173;
- Computer Technology Can Enhance Presentation of Pharmacological Principles, W.H. Riffe, 148;
- HIV — Who Will Save the Children? A.M. Bolinger, 143;
- Formulating Capital Investment Decisions with Monte Carlo Simulation, D.A. Sclar, 152;
- Little (A) Known Area of Pharmacists' Involvement: Analysis of Drugs, B.W. Hadzija, 177;
- Not All Over-The-Counter Drugs Are Safe, N.G. Popovich, 166;
- Principles of Pediatric Pharmacotherapy, M.C. Nahata, 155;
- Prevention of Osteoporosis in Premenopausal and Postmenopausal Women, R. Sagraves, 158;
- Teaching**
- Evaluation of CAI Versus TLP, H.M. Anderson-Harper and H.L. Mason, 72S;
- It's Not *What* You Know, But *How* You Know, J.A. Bell, 383;
- Multidisciplinary (A) Approach to Teaching Pharmacy Students, M.B. Nichol, 369;
- Preparing Graduate Students for Teaching in Pharmacy Schools, N.G. Popovich and H.L. Mason, 96S;
- Preparing Teaching Assistants for Pharmacy Lab, M.A. Kirkpatrick, 89S;
- Resolution (The) of Conflict Through Deception: Implications for the Teaching of Ethics in Pharmacy, R.A. Jackson and M.A. Pirl, 130S;
- Survival (A) Course for New Teachers of Pharmacy Students, K.W. Lem and S.K. Shimomura, 137S;
- Teaching a Medication-History-Interviewing Model to Pharmacy Students, P.L. Ranelli, 105S;
- Teaching (A) Model on Purchasing and Inventory Control, M.R. Lahoz and R.O. Nickel, 131S;
- Teaching and Consulting in a Home Health Care Agency, S. Lorentz and D.S. Adler, 77S;
- Teaching and Learning About Ethical Dilemmas in Pharmacy, W. Lowenthal, 55;
- Teaching Biotechnology at the University of Illinois at Chicago, M.J. Groves, M.E. Klegerman, 99S;
- Teaching Human Values in Pharmacy Education: Case Studies from the Classroom and Hospital, S. Poirier, 84;
- Teaching of Biochemistry in Pharmacy, A. Marti, 86S;
- Teaching Doctor of Pharmacy Students to Teach: An Elective Teaching/Academic Rotation, K.J. Tietze, *et al.*, 146S;
- Teaching Students at Remote Experiential Sites Via 2-Way Interactive Television, R.H. Fuerst, *et al.*, 137S;
- Teaching the Importance of Pharmacokinetics in Drug Development, T. Stephard, *et al.*, 102S;
- Treating Teaching as a Scholarly Activity, K.W. Miller, 373;
- Use of Experiential Teaching Methodologies in a Didactic Geriatrics Course, K. Karnik, *et al.*, 153S;
- Using Bloom's Taxonomy of the Cognitive Domain to Teach a Required Course in Pharmacology Laboratory Course: Teaching for Lifetime Learning, M.H. Malone, 108S;
- Using Modified Group System Teaching to Teach Clinical Pharmacokinetics, P.J. Sims, 141S;
- Using Student-Written Book Reviews as a Teaching Tool, P.L. Ranelli, 115S;
- What Makes Science Hard, S. Tobias, 378;
- Teaching Communication Skills, L.J. Morin, *et al.*, 153S;
- Teaching Topics Update**
- Molecular Strategies for the Inhibition of Human Immunodeficiency Virus Reverse Transcriptions, M. Goldman, 387;
- Pharmacotherapeutics for the AIDS Patient, K. Fife, 388;
- Towards the Determination of the Structure of HIV-1 p. 24: A Possible Target for Antiviral Therapy, A. Prongay, 391;
- Technicians**
- A Strategic Analysis of the Pharmacy Technician Role in Tennessee, M.D. Smalley, *et al.*, 115;
- Telemetry**
- The Use of Telemetry Monitoring System for Teaching Pharmacological Responses of Drugs, M.F. Sylvestri and Y-S Lau, 86S;
- Television**
- Evaluation of Performance and Student Attitudes of Interactive Televised Instruction, R.L. Talbert, *et al.*, 85S;
- Student Evaluation of a Unique Interactive Television Learning System, R.L. Talbert, *et al.*, 77S;
- Teaching Students at Remote Experiential Sites Via 2-Way Interactive Television, R.H. Fuerst, *et al.*, 137S;
- Testing**
- A Computerized Scenario-Question (S-Q) Database and Test Assembly Software in a Pharmacy Curriculum, W.R. Kirchain, *et al.*, 116S;
- Test Item Banking Using Manual and Automated Files, P.G. Grussing, 82S;
- Thailand**
- Pharmacy Education in Thailand N. Charupatanapong and K.L. Rascati, 49;
- Postgraduate Plans of Thai Pharmacy Students, N. Charupatanapong, 114S;
- Self-Medication Practices in a Developing Country-A Preliminary Study in Thailand, N. Charupatanapong and K. Rascati, 130S;
- Therapeutics**
- Initial Evaluation of a Problem-Solving Format for Therapeutics Instruction: A Continuum from Nonprescription Therapeutics, R.W. Sommi and P.A. Marken, 148S;
- Integration of Problem-Solving Into a Clinical Pharmacy and Therapeutics Course Through the Pharmacists' Work-up of Drug-Related Problems, R.A. Hamilton, *et al.*, 153S;
- Oral Examinations in a Clinical Therapeutics Course, K. Hill-Besinque, 119S;
- Therapeutics on Videotape for the Continuing Education of Community and Hospital Pharmacists, R.W. Bennett and J.W. Blank, 69S;
- Use (The) of Computer-Assisted Case Presentations in a Clinical Therapeutics Course, A.K. Hurst, *et al.*, 89S;
- Third Party**
- An Assessment of Chain Pharmacies' Costs of Dispensing a Third Party Prescription, K.W. Schafermeyer, *et al.*, 129S;
- Selective Contracting with Third Party Drug Programs: Implications for Pharmacy Management Decision Making, L.N. Larson, 81S;
- Toxicity of Parenteral Antibiotics to Rabbit Kidney Cells Cultured on Membrane Filters, S.M. Ford and E.A. Gilberti, 124
- Toxicology**
- Bachelor (A) of Science Toxicology Program: Description, Resources, Student Profiles and Graduate Placement, P.W. Ferguson, W.M. Bourn, C.N. Pope and B.L. Roberts, 243;
- Tracking**
- Assessment of Student Interest in a Tracking Approach to Curricular Differentiation, J.R. Draugalis and J.L. Bootman, 72S;

- Development of an Elective Differentiated Curriculum, Z.T. Grapes, *et al.*, 72S;  
Tracking the Future, G.D. Lawrence, 82S;
- Training**  
Determining Managerial Education and Training Needs of Pharmacy Owners and Managers, M.D. Smalley, *et al.*, 109S;  
Educational Assessment of In-Service Training for the Medical Staff of a State Mental Institution, C.D. Ponte and B.T. Lively, 106S;  
Extended Offerings of Certificate Programs Through Training of Off-Campus Instructors, R.A. Carter, *et al.*, 138S;  
Training Relevance of Pharmacy Students, H.M. Anderson-Harper, *et al.*, 94S;
- Training Site**  
Interactive (A) Relational Database (Infosite) to Facilitate Baccalaureate Pharmacy Students in Selection of Experiential Training Sites, T.A. Sajbel and K.E. Johnson, 148S;  
Role (A) Model Ambulatory Care Clinic Training Site in community-Based Pharmacy, C.D. Peterson and E.O. Magarian, 154S;
- Transforming the Odyssey: Curriculum as in Outcome-Directed Pathway, G. Loacker, 361;  
Treating Teaching as a Scholarly Activity, K.W. Miller, 373;  
Twenty (A) Year Perspective, G.A. Cochran, 198;
- \* \* \*
- USP-DI**  
The Utility of a Computerized Content Analysis of USP DI Advice for Patients in Visualizing Patient Drug Information, R.E. Pearson, 101S;  
Undergraduate Research at the University of Arkansas College of Pharmacy, Lattin, *et al.*, 100S;  
Use of Computer-Assisted Instruction to Review Microbiology and Antimicrobial Agents, P.L. Carver, J.C. Novak and E.M. Harris, 248;
- Using**  
Using a Computer-Simulation Program and a Traditional Approach to Teach Pharmacy Financial Management, K.A. Lawson, M.D. Shepherd and V.R. Gardner, 226;  
Using Practitioners in Pharmacy Labs, A.O. Moore, *et al.*, 90S;
- \* \* \*
- Validation**  
Process (A) to Validate Life Experiences for Credit Toward Clerkship Rotations, C. Aceves-Blumenthal, 151;  
Protocol for the Validation of Life Experiences for Clinical Clerkships, C. Aceves-Blumenthal, *et al.*, 123S;  
Validity and Reliability of an Instrument that Evaluates PharmD Student Performance During a Patient Presentation, D.E. Beck and G.A. Clayton, 120S;
- Values**  
Inculcating Research Values in Undergraduate Pharmacy Students, K. Winans and S. Madhavan, 118S;  
Parsing the Paradigms: The Case for Human Values in the Pharmacy Curriculum, R.G. Mrtek and M.B. Mrtek, 79;  
Teaching Human Values in Pharmacy Education: Case Studies from the Classroom and Hospital, S. Poirier, 84;
- Variables Influencing the Labor Force Attachment of Male and Female Pharmacists, P. Lurvey, 131S;**
- Verbal Skills**  
Written and Verbal Literature-Related Skills Required in Senior Clinical Clerkships at the University of Iowa, B.H. Rowland, 70S;
- Videotape**  
An Assessment of Need for Video- and Computer-Mediated Continuing Education, M.L. Greer, 78S;  
Home Video: Design for Future Continuing Education, R.W. Bennett and J.W. Blank, 79S;  
Interactive Video: Enhancement of Communication Skills for Pharmacy Students, M.W. McKenzie and C.L. Kimberlin, 83S;  
Therapeutics on Videotape for the Continuing Education of Community and Hospital Pharmacists, R.W. Bennett and J.W. Blank, 69S;  
Using Videotape as a Recruiting Tool for Pharmacy Organizations, A.Z. Angle and J. Blank, 107S;  
Utilization (The) of Interactive Video and Instructional Design Systems in the Delivery of Visualized Patient Drug Information, B.G. Felkey, *et al.*, 105S;  
Video reviews, 99;
- Voting Delegates**  
Roster of the Voting Delegates in Attendance at the 92nd Annual Meeting of the American Association of Colleges of Pharmacy, AACP Staff, 67S;
- \* \* \*
- Waxman-Hatch (The) Act in Undergraduate Pharmacy Education: A National Survey, S. Kucukarslan and A. Gumbhir, 143S;**
- Who Is Winning? Who Is Losing? J.A. Biles, 88;**
- Wholesaler**  
EOQ in the Primary Wholesaler Environment, G.E. Bass, *et al.*, 90S;
- Women**  
A Wonderful Profession for Women???, M.K. Speedie, 405;  
Career Benefits/Options for Women in the 21st Century, G. Smith, *et al.*, 146S;  
Career Patterns of Male and Female Pharmacists: A 20 Year Cross-Sectional Study, P. Lurvey, 111S;  
Current Approaches and Perceived Barriers to Scholarship in Women Pharmacy Faculty, V.F. Roche, A.M. Haddad and A.J. Matuszak, 236;  
Factors Influencing Research Productivity as Perceived by Women Pharmacy Faculty, A.J. Matuszak, *et al.*, 108S;  
Issues Facing Women in Pharmacy: Preparing Women for the Profession, B.L. Sauer and M.A. Koda-Kimble, 107S;  
Mobility and Management Patterns in Pharmacy Career Histories of Male and Female Pharmacists, P. Lurvey, 129S;  
Women's Health Care Elective, J. McCombs, 97S
- Work**  
Clerkship Faculty Workloads in Entry Level PharmD Curricula, N.E. Kawahara, *et al.*, 116S;  
Satisfaction Evaluation of Pharmacy Students Toward Required External Work Experience, E.A. Collins, *et al.*, 92S;
- Writing**  
Computer-Evaluated (A) Exercise in Writing for General Audiences Designed for Second Year Pharmacy Students, M.J. Jinks, 116S;  
Experience in Teaching Automated Report Writer Usage as a Management Tool, J.T. Gibson, 73S;  
Written and Verbal Literature-Related Skills Required in Senior Clinical Clerkships at the University of Iowa, B.H. Rowland, 70S;